



ACCREDITATION EVIDENCE

Title: Comprehensive Local Needs Assessment

Evidence Type: Corroborating

Date: 1 May 2020

WAN: 22-0583

Classification: Report

PII: No

Redacted: No





May 1, 2020

WYOMING PERKINS V: COMPREHENSIVE LOCAL NEEDS ASSESSMENT

WESTERN WYOMING COMMUNITY COLLEGE

Carbon | Lincoln | Sweetwater | Sublette | Uinta

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INTRODUCTION

The Strengthening Career and Technical Education for the 21st Century Act, known as Perkins V, requires that applicants conduct a Comprehensive Local Needs Assessment (CLNA). The purpose of the assessment is to provide a comprehensive look at the current state of career and technical education (CTE), identify gaps, and determine where improvements can be made to enhance student success.

In February of 2020, Western Wyoming Community College (WWCC) contracted Joe M Barbuto to conduct the CLNA for their institution and school districts located within in their service region, which includes: Carbon, Lincoln, Sweetwater, Sublette, and Uinta Counties. Within those counties, the following school districts are collaborating with WWCC to complete local assessments:

- Carbon County School District #1
- Lincoln County School District #1
- Lincoln County School District #2
- Sweetwater County School District #1
- Sweetwater County School District #2
- Uinta County School District #1
- Uinta County School District #4

With the help of education administrators, educators, other staff, and local stakeholders and leaders, data regarding CTE was collected and analyzed. Within this report are the results of that effort, along with information about the region, summaries of findings and conclusions.

As a result of the Coronavirus Pandemic of 2020, it was required that most of this information be obtained through virtual and/or electronic means. A sincere sentiment of gratitude is expressed to the collaborating school districts and WWCC for accommodating the process and providing the information, especially given the unusual nature of the circumstances at the time.

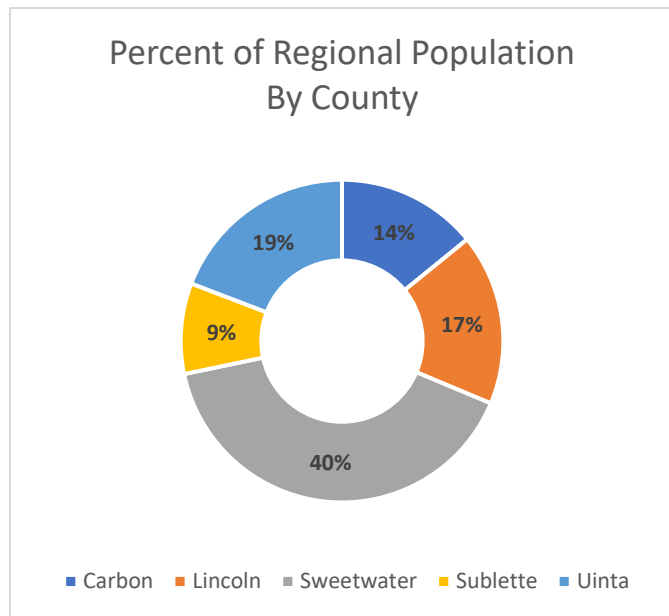
REGIONAL SNAPSHOT

According to the United States Census Bureau, the total population for the WWCC service region is estimated to be 109,165 people.

Major population centers include Rock Springs, Green River, Rawlins, Kemmerer, Afton, Evanston, and Lyman.

County	Population
Carbon	15,477
Lincoln	19,011
Sweetwater	44,117
Sublette	9,951
Uinta	20,609

Source: U.S. Census Bureau



Source: U.S. Census Bureau

Broken down by race and ethnicity, the region is comparable to statewide statistics, but has a much larger proportion of people identifying as white than throughout the rest of the nation. Counties in the region with larger populations have slightly more ethnic and racial diversity:

Race/Ethnicity	Carbon	Lincoln	Sweetwater	Sublette	Uinta	Wyoming	United States
White	93.0%	95.9%	93.1%	96.3%	93.4%	91.5%	72.2%
Hispanic or Latino	18.0%	4.6%	16.0%	7.3%	9.1%	10.0%	18.3%
Two or More Races	1.8%	2.6%	2.0%	3.2%	3.5%	2.4%	3.4%
Native American	1.7%	0.5%	1.7%	0.4%	0.8%	2.8%	0.9%
Other	1.4%	0.6%	1.3%	0.0%	2.1%	1.5%	5.0%
Black	1.1%	0.1%	0.8%	0.0%	0.1%	0.6%	12.7%
Asian	1.0%	0.3%	0.6%	0.1%	0.1%	1.0%	5.6%
Pacific Islander	0.1%	0.0%	0.5%	0.0%	0.0%	0.2%	0.2%

Source: U.S. Census Bureau

When disaggregated by gender, the region has ratios similar to the rest of the state, but unlike the nation as a whole, a higher population of males than females. Sublette County is notable for having a much larger margin as a percentage (8%) between genders than anywhere else in the region:

Gender	Carbon	Lincoln	Sweetwater	Sublette	Uinta	Wyoming	United States
Female	46.0%	48.9%	48.5%	46.0%	49.3%	49.0%	50.8%
Male	54.0%	51.1%	51.5%	54.0%	50.7%	51.0%	49.2%

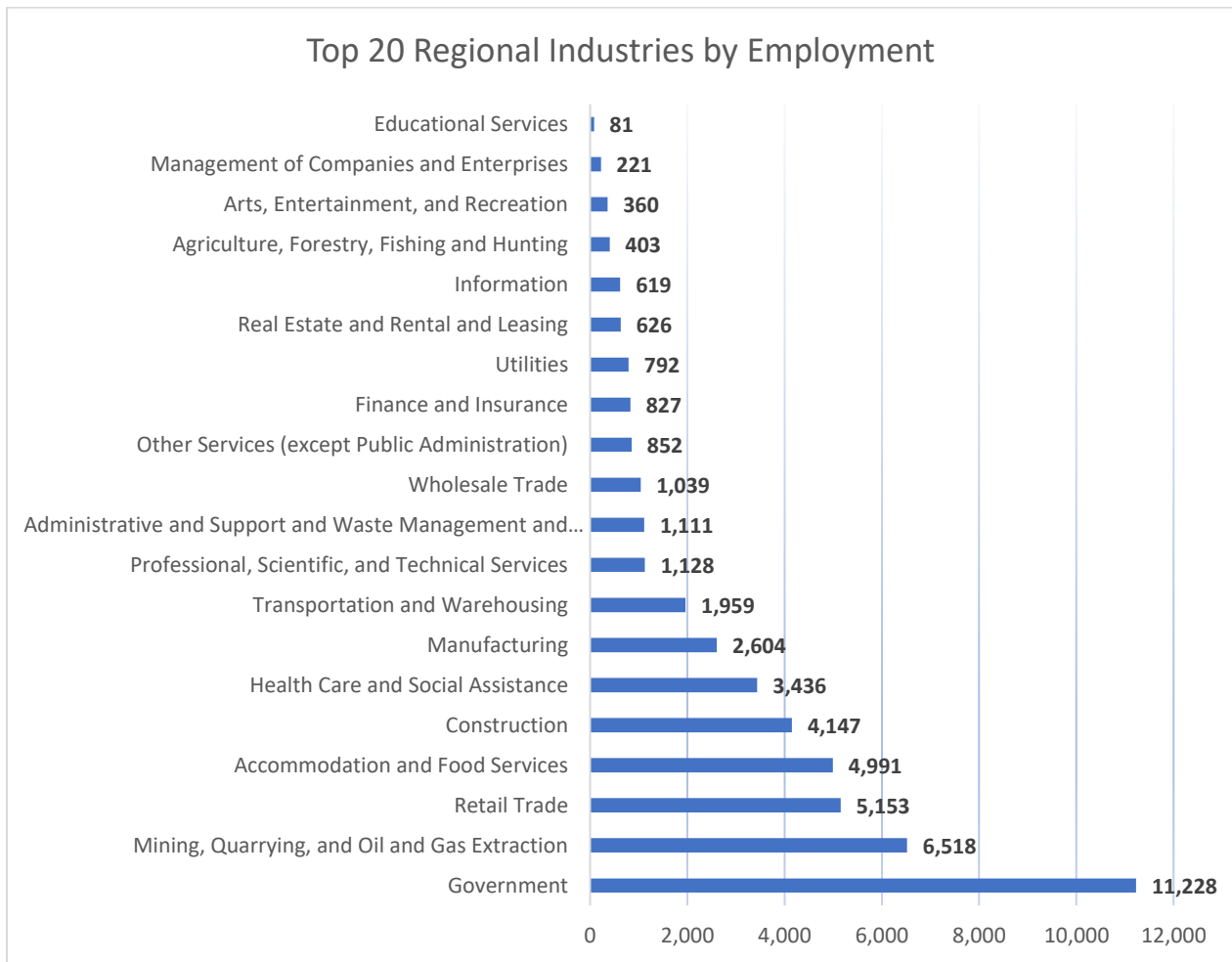
Source: U.S. Census Bureau

Regionally, the average median income is \$66,929.60 – higher than state and national numbers. Higher median incomes within counties can be attributed to mineral extraction and energy production, which at times offers plentiful jobs and high rates of pay.

Region	Median Income	Employment Rate
Carbon	\$60,206	61.60%
Lincoln	\$64,519	63.60%
Sweetwater	\$73,008	66%
Sublette	\$78,680	70.70%
Uinta	\$58,235	62.80%
Wyoming	\$61,584	62.50%
United States	\$61,937	59.80%

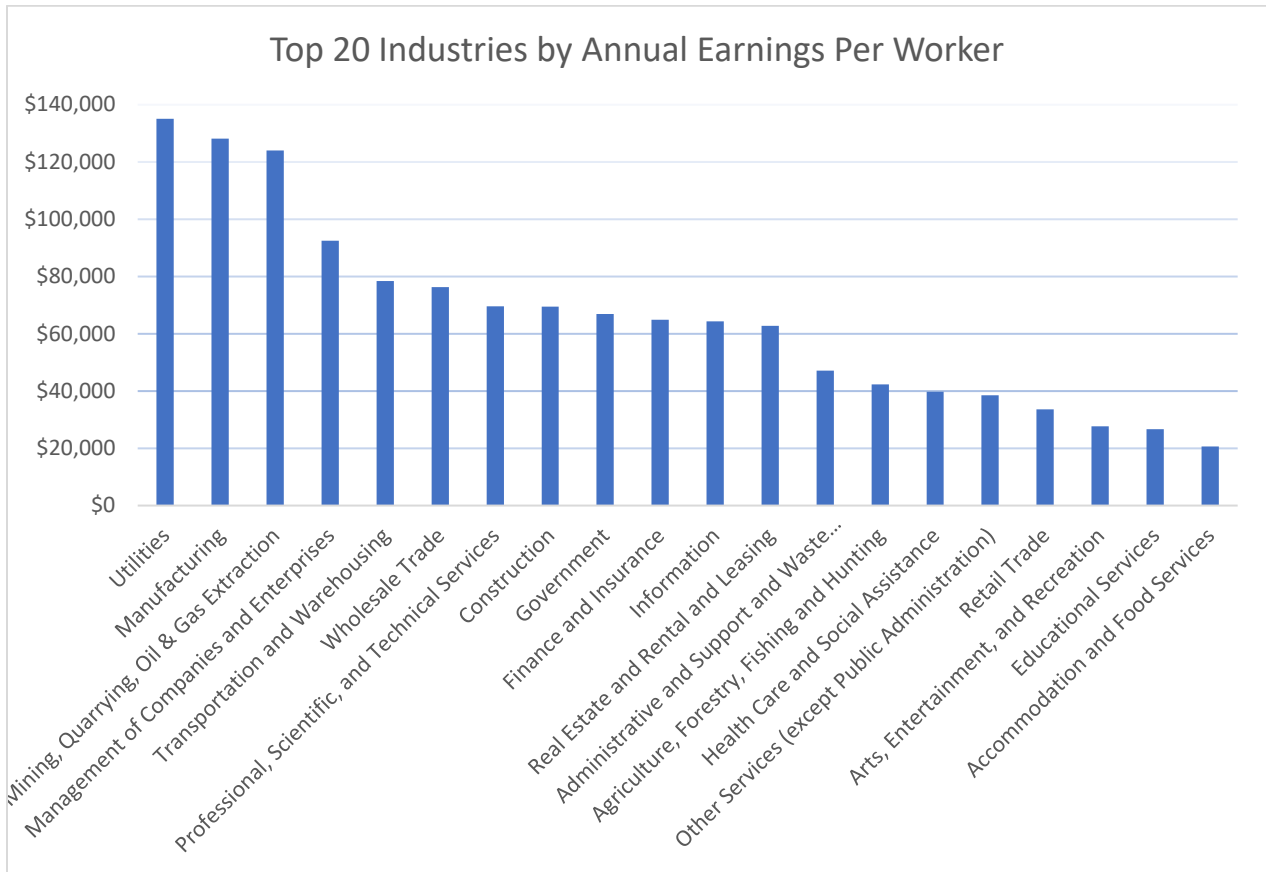
Source: U.S. Census Bureau

Within the region, government is the top employing industry. This category includes any occupations funded by public dollars, including public education. Industries related to mineral extraction, construction, service occupations, and health care employ the majority of individuals in the region:



Source: EMSI/Wyoming Department of Employment

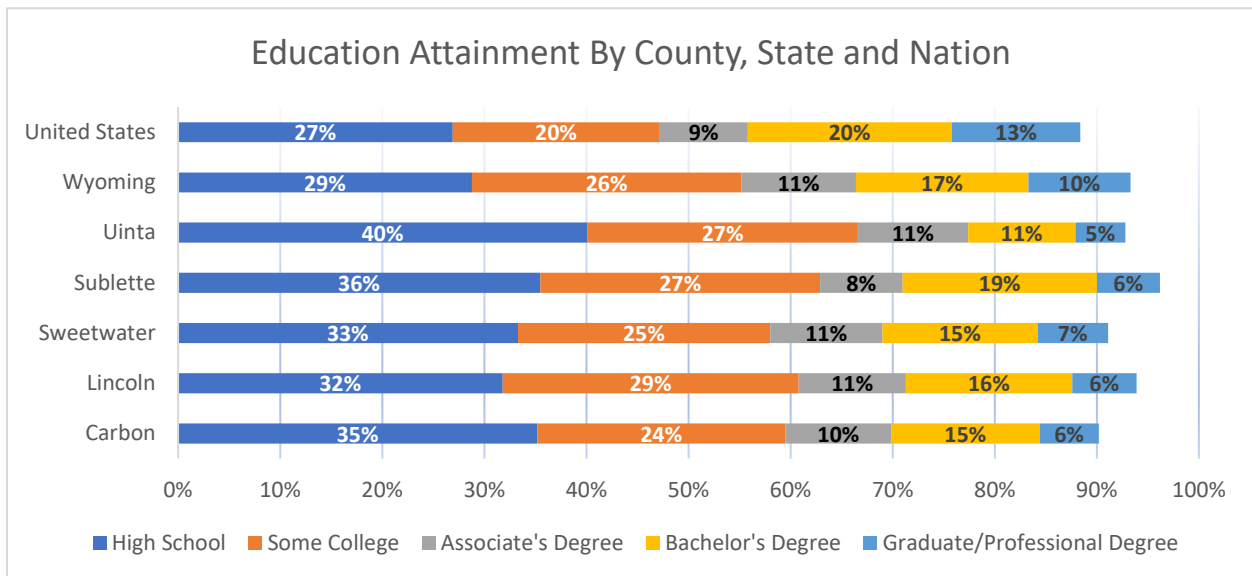
When considered by earnings per worker, industries related to energy production and mineral extraction provide higher wages, whereas many industries that employ a greater number of people find themselves towards the bottom of the annual earnings list.



Source: EMSI/Wyoming Department of Employment

Regarding educational attainment, the region has a higher number than both Wyoming and the nation of individuals with just a high school diploma. Postsecondary degrees are less common in the state and region than in the rest of the United States. A large percentage of individuals in the state and region report having had some college, but no degree.

The average high school graduation rate in the region is 92.82%. This is slightly below the statewide average of 93.3% and above the national average, 88.3%.



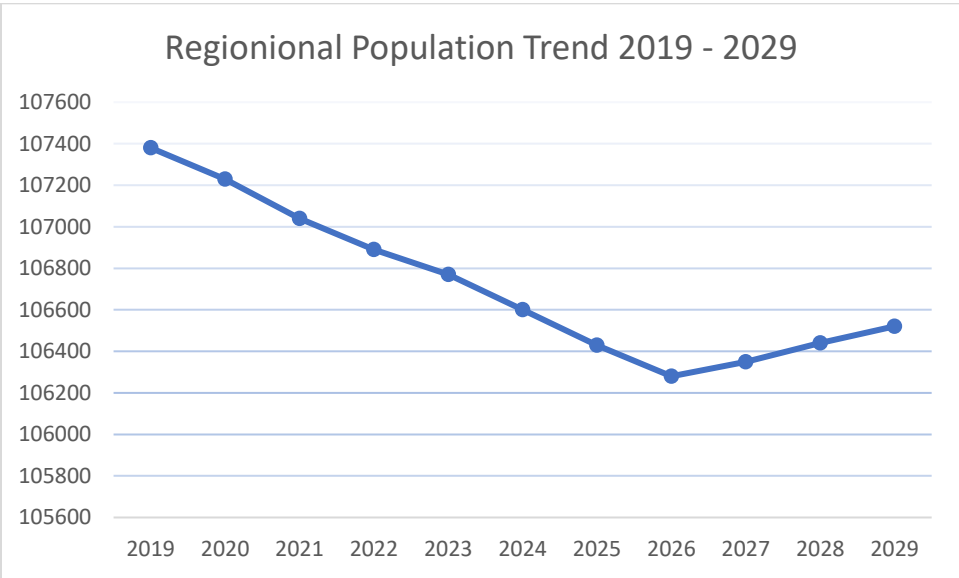
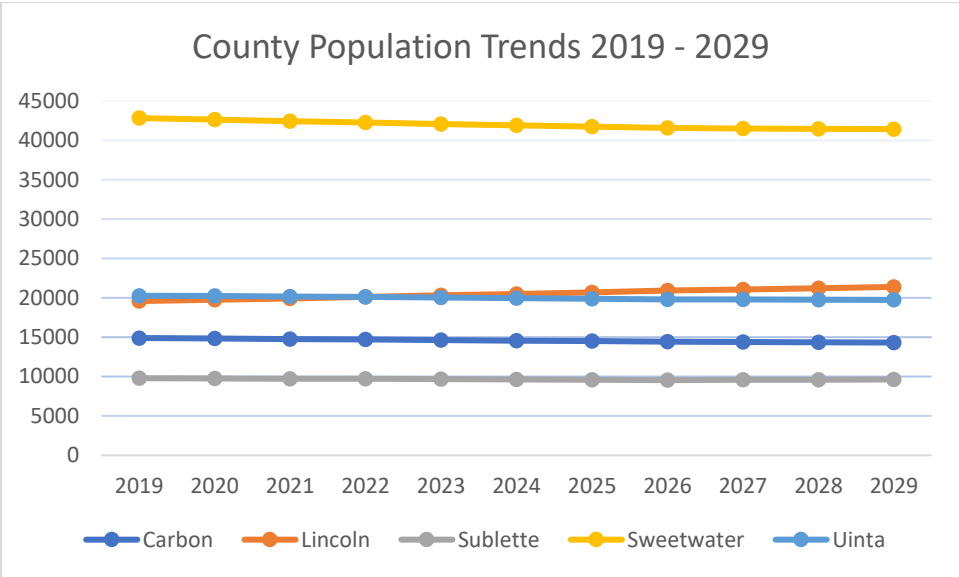
Source: U.S. Census Bureau

KEY POINTS

- All counties within the WWCC service region are overwhelmingly white.
- Regionally, there is a high proportion of males to females, particularly when compared to the rest of the nation.
- Most high wage jobs in the region are related to mineral extraction and energy production.
- The state and region have a much higher percent of individuals who have completed 'Some College' than the nation.
- Within the region, the percent of individuals with only a high school diploma is higher than both the State of Wyoming and nation.
- Throughout Wyoming and the region, attainment of bachelor's degrees and higher fall well behind the national average.

REGIONAL LABOR MARKET PROJECTIONS

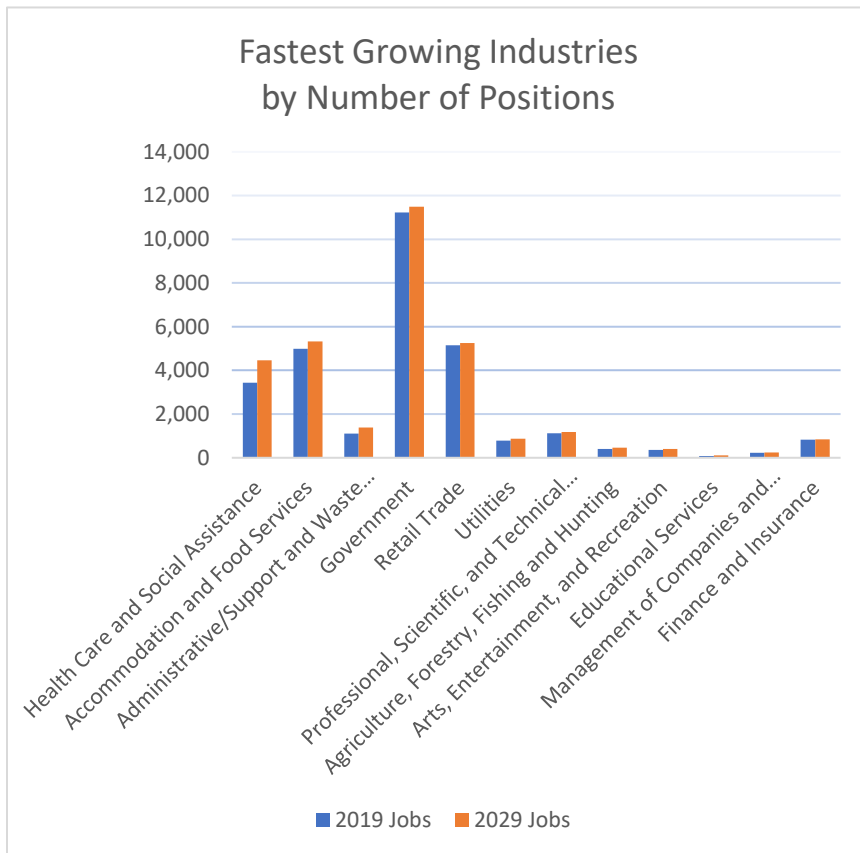
Between 2019 and 2029, every county in the region, with the exception of Lincoln County, is forecasted to see a slight decrease in population. Sublette County’s population is projected to reverse course and grow slightly in 2028 - 2029. Sweetwater County will lose the most population, decreasing by approximately 1400 people. Regionally, the population is projected to decline by 840.



Source: Wyoming Department of Administration & Information, Economic Analysis Division

Population losses can be attributed to declines in the mineral extraction and energy production sectors.

By 2029, several industries within the WWCC service region are projected to see growth.



Among those industries, educational services and health care are projected to see the largest increase, by percentage, of growth at 44% and 30% respectively. By actual numbers, however, healthcare is the fastest growing industry, employing well over 1000 people by the year 2029.

Administrative services and accommodation/food services will also see significant gains by 2029.

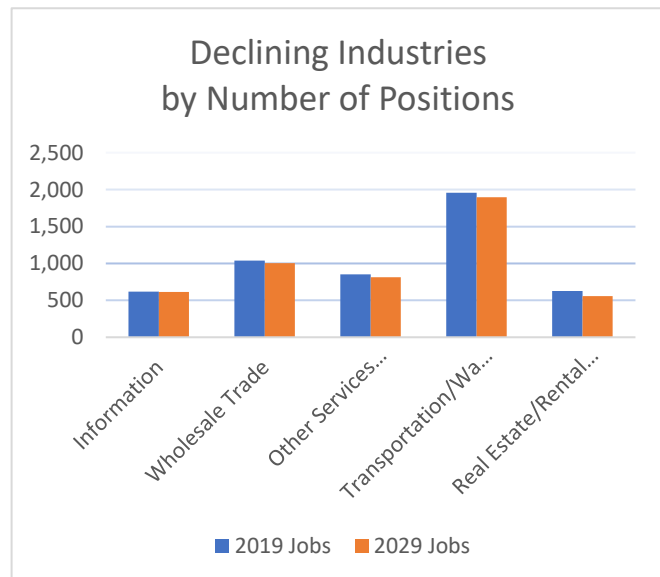
Government is expected to continue as the largest employing industry in the region.

Source: EMSI/Wyoming Department of Employment

Some industries are projected to see a decline over the next ten years.

Real Estate and Rental and Leasing Industry and Transportation/Warehousing Industry will see the most significant drops in numbers, projected to lose between 60 and 70 jobs by 2029.

Not included on either chart are the Construction, and Manufacturing Industries, which are projected to see minimal changes over the next ten years.



Source: EMSI/Wyoming Department of Employment

Within the WWCC service region, some high wage occupations are projected to see significant growth by 2029. A high wage is considered as sixty percent (60%) of the average hourly wage in a county as determined by the U.S. Bureau of Labor Statistics. Within the WWCC service region, those dollar amounts by county are as follows:

Carbon	\$14.37/hour
Lincoln	\$14.18/hour
Sublette	\$16.86/hour
Sweetwater	\$17.46/hour
Uinta	\$12.33/hour

High wage occupations requiring less than an associate degree projected to grow within the WWCC service region by at least 15 positions by the year 2029:

Occupation	2019 Jobs	2029 Jobs	Difference	Avg Hrly Wage
Personal Care Aides	523	627	104	\$13.45
Cooks, Restaurant	475	572	97	\$14.40
Medical Secretaries	248	303	55	\$15.05
Laborers and Freight, Stock, and Material Movers, Hand	450	500	50	\$17.43
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	654	699	45	\$12.86
Teacher Assistants	743	784	41	\$14.30
Landscaping and Groundskeeping Workers	225	264	39	\$14.72
First-Line Supervisors of Food Preparation and Serving Workers	354	387	33	\$13.95
Security Guards	146	176	30	\$14.44
Home Health Aides	143	171	28	\$13.34
Carpenters	529	554	25	\$22.31
Stock Clerks and Order Fillers	384	408	24	\$13.82
Bus Drivers, School or Special Client	265	289	24	\$17.17
Receptionists and Information Clerks	111	132	21	\$13.10
Self-Enrichment Education Teachers	86	107	21	\$18.02
Plumbers, Pipefitters, and Steamfitters	120	139	19	\$25.85
Customer Service Representatives	211	229	18	\$16.27
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	124	140	16	\$13.26

High wage occupations requiring a postsecondary nondegree award projected to grow within the WWCC service region by at least 15 positions by the year 2029:

Occupation	2019 Jobs	2029 Jobs	Difference	Avg Hrly Wage
Nursing Assistants	505	566	61	\$13.80
Medical Assistants	83	109	26	\$15.05
Dental Assistants	144	172	28	\$15.33

High wage occupations requiring an associate degree projected to grow within the WWCC service region by at least 15 positions by the year 2029:

Occupation	2019 Jobs	2029 Jobs	Difference	Avg Hrly Wage
Preschool Teachers, Except Special Education	142	168	26	\$19.16
Respiratory Therapists	42	61	19	\$25.41
Veterinary Technologists/Technicians	40	55	15	\$14.29

High wage occupations requiring at least a bachelor's degree projected to grow within the WWCC service region by at least 15 positions by the year 2029:

Occupation	2019 Jobs	2029 Jobs	Difference	Avg Hrly Wage
Registered Nurses	843	1,078	235	\$28.32
Elementary School Teachers, Except Special Education	498	524	26	\$27.25
Medical/Health Services Managers	122	148	26	\$41.01
Postsecondary Teachers	166	192	26	\$28.43
Physical Therapists	71	97	26	\$38.08
Lab Technologists/Technicians	81	104	23	\$24.70
Accountants/Auditors	240	261	21	\$28.21
Substitute Teachers	460	480	20	\$13.55
Secondary School Teachers, Except Special and CTE Education	353	372	19	\$27.77
General/Operations Managers	912	929	17	\$41.90
Speech-Language Pathologists	42	58	16	\$34.70
SAMH Counselors	63	78	15	\$25.64

By the year 2029, several high wage occupations in the regions will see a significant decrease in the number of available jobs, particularly those related to mineral extraction and energy production.

High wage occupations projected to decline within the WWCC service region by at least 10 positions by the year 2029:

Occupation	2019 Jobs	2029 Jobs	Difference	Avg Hrly Wage
Heavy and Tractor-Trailer Truck Drivers	1,633	1,502	(131)	\$23.03
Service Unit Operators, Oil, Gas, and Mining	659	554	(105)	\$24.92
Roustabouts, Oil and Gas	644	551	(93)	\$19.40
Electricians	464	386	(78)	\$28.32
Industrial Machinery Mechanics	655	604	(51)	\$36.68
Helpers--Extraction Workers	291	246	(45)	\$17.66
Office Clerks, General	1,206	1,162	(44)	\$16.94
Maids and Housekeeping Cleaners	463	419	(44)	\$11.56
First-Line Supervisors of Construction Trades and Extraction Workers	674	634	(40)	\$31.51
Mobile Heavy Equipment Mechanics, Except Engines	361	324	(37)	\$29.69

Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	536	506	(30)	\$17.21
Tellers	150	128	(22)	\$12.86
Construction Laborers	842	822	(20)	\$17.38
Correctional Officers and Jailers	139	119	(20)	\$19.80
Civil Engineers	131	112	(19)	\$39.67
Chemical Plant and System Operators	131	112	(19)	\$38.32
Petroleum Engineers	174	155	(19)	\$49.80
Maintenance Workers, Machinery	156	139	(17)	\$29.65
Petroleum Pump System Operators, Refinery Operators, and Gaugers	423	406	(17)	\$37.02
Bookkeeping, Accounting, and Auditing Clerks	495	479	(16)	\$16.90
Postal Service Clerks	68	52	(16)	\$22.62
Mining and Geological Engineers, Including Mining Safety Engineers	72	57	(15)	\$43.33
Inspectors, Testers, Sorters, Samplers, and Weighers	130	116	(14)	\$25.83
Boilermakers	91	77	(14)	\$33.01
Roof Bolters, Mining	85	72	(13)	\$45.27
Gas Plant Operators	196	183	(13)	\$35.96
Executive Secretaries and Executive Administrative Assistants	74	63	(11)	\$22.59
Postal Service Mail Carriers	69	58	(11)	\$21.60
Legal Secretaries	59	48	(11)	\$16.90
Derrick Operators, Oil and Gas	92	81	(11)	\$27.27
Plant and System Operators, All Other	86	76	(10)	\$28.47

Source: EMSI/Wyoming Department of Employment

KEY POINTS

- Occupations related to mineral extraction and energy production will experience a significant decrease in numbers over the next ten years leading to a regional population decline over the next ten years. They will, however, continue to employ nearly 6,000 individuals within the region. Unknown is whether this data takes into consideration the recently announced plans to shutter several units at coal-fired power plants in the region. This will directly and indirectly impact thousands of jobs in the region.
- The Healthcare and Social Assistance Industry is projected to see the most growth by 2029, increasing by over 1,000 positions. Many of these positions will be considered high-wage and require a variety of educational attainment. Registered Nurses are expected to see the most growth of any single profession, adding 235 positions over the next 10 years. Nursing/Medical Assistants, Personal/Home Care Aides, Medical/Health Service Managers, Medical Secretaries, Respiratory Therapists, and Physical Therapists are among other health-related occupations adding positions by 2029.
- Slight growth is projected in elementary and secondary teaching positions except for special and CTE educators. Postsecondary teaching positions are anticipated to grow, as well. Within education, Teacher Assistants will continue to provide the most positions.

- There are some endeavors within the region to pursue economic development and diversification. Currently, several communities and counties have programs intended to attract business and industry to their respective areas. Additionally, the State of Wyoming provides resources and assistance in this area.

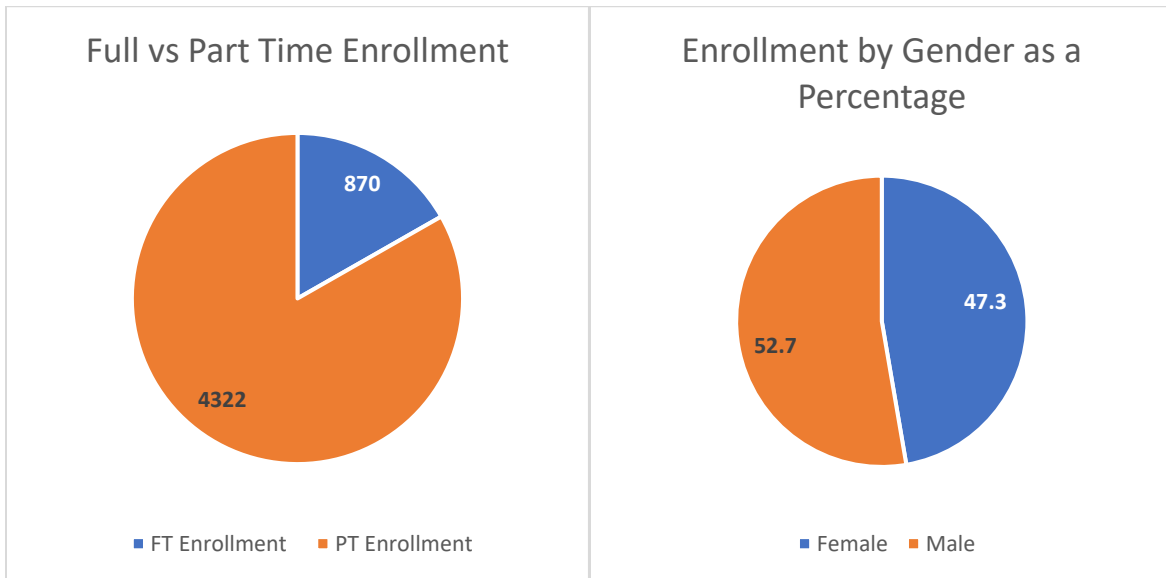
INSTITUTION PROFILE

WWCC 2018 – 2019 Enrollment Statistics

Data Courtesy of the Wyoming Community College Commission unless otherwise noted.

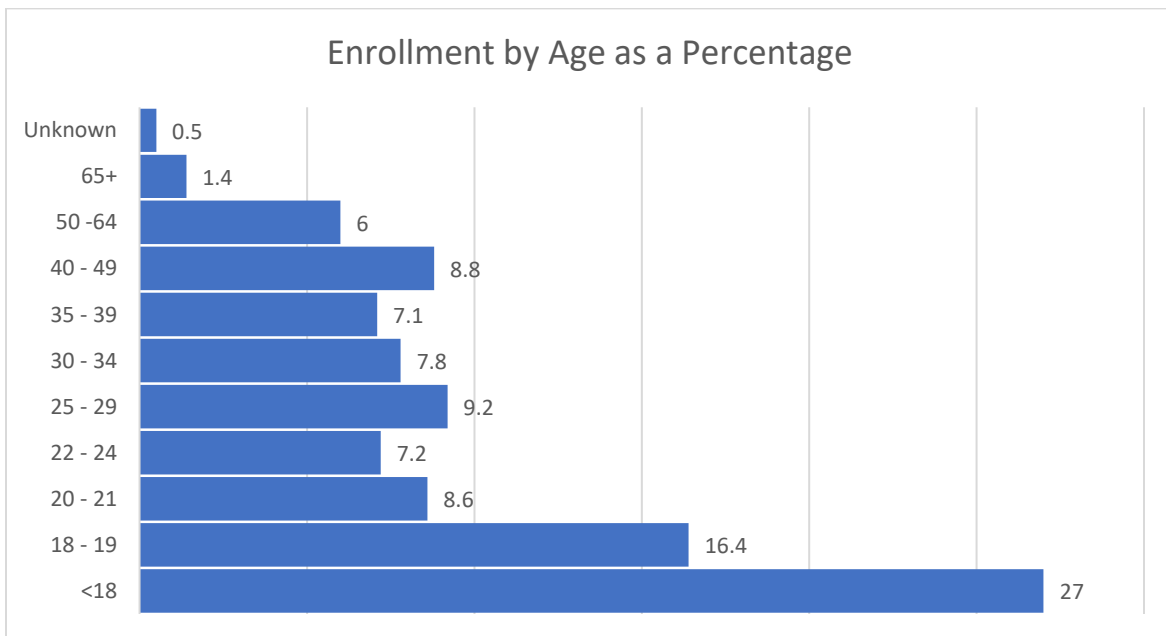
Most WWCC students are enrolled on a part time status.

Enrollment by gender is comparable to the region.



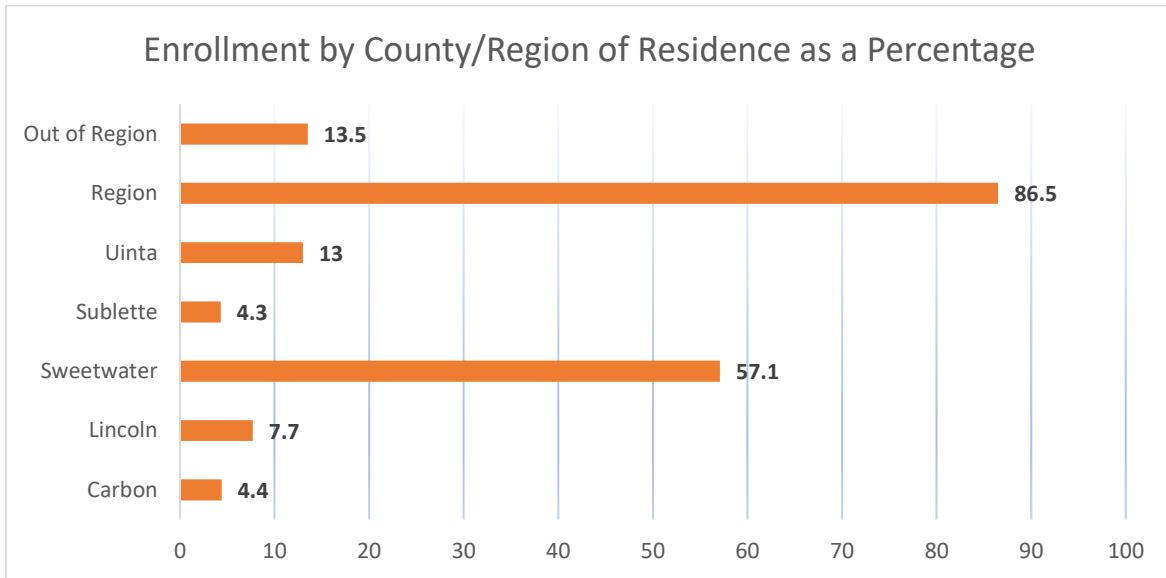
Total Enrollment = 4,990

The majority of currently enrolled students are between the ages of 18 and 21.

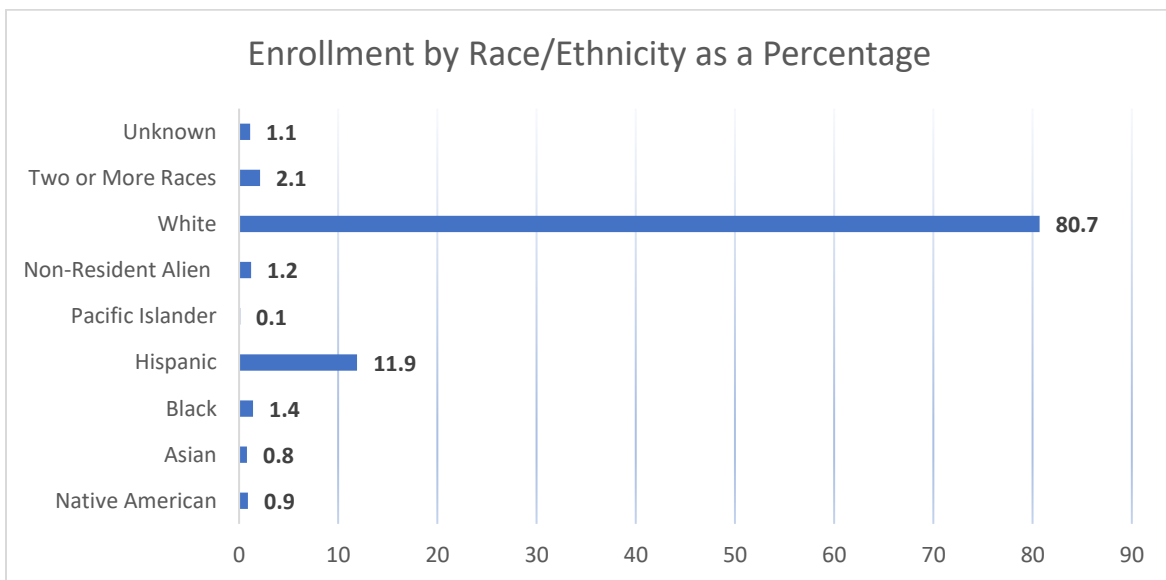


The majority of students enrolled at WWCC currently reside within the school’s service region, which includes Carbon, Lincoln, Sublette, Sweetwater, and Uinta Counties and the eleven school districts within those counties.

Outside of the region, students come from a wide variety of Wyoming counties, other states, and nations.



While the student population at WWCC is overwhelmingly white, it is slightly more diverse than the region and state.



REGIONAL & EDUCATIONAL PARTNERS

Partnerships with school districts in the region create opportunities for dual and/or concurrent enrollment, allowing high school students to earn college credits and certifications prior to graduating. Boards of Cooperative Education (BOCES) programs in each district help provide learning opportunities and support progress in communities.

WWCC maintains Memorandums of Understanding (MOU) with every school district within the region to provide credit programs through dual/concurrent enrollment and distance education.

Regional School District Partners

- Carbon: Carbon County School District #1, Carbon County School District #2
- Lincoln: Lincoln County School District #1, Lincoln County School District #2
- Sublette: Sublette County School District #1, Sublette County School District #9
- Sweetwater: Sweetwater County School District #1, Sweetwater County School District #2
- Uinta: Uinta County School District #1, Uinta County School District #4, Uinta County School District #6

2018 – 2019 Concurrent, Dual and Distance Enrollment Statistics

Concurrent Enrollment =	672
Dual Enrollment =	706
Distance Education =	2,482

Regional Business and Industry Partnerships

WWCC partners with regional business and industry leaders to provide technical and industry/workforce development programs for employees and provide students with opportunities for internships and hands-on experience. Members of the business and industry community also serve on academic and CTE advisory committees at WWCC.

Transfer Institution Partners

Articulation agreements are in place with 29 higher education institutes from across the nation. This allows WWCC students to easily transition between their associate-level and bachelor-level degrees. Several of the institutions provide distance learning opportunities for site-bound students with the WWCC service region.

COMPLETION STATISTICS

Between 2015 and 2018, WWCC saw an increase in completions among a number of programs, including CTE programs of study.

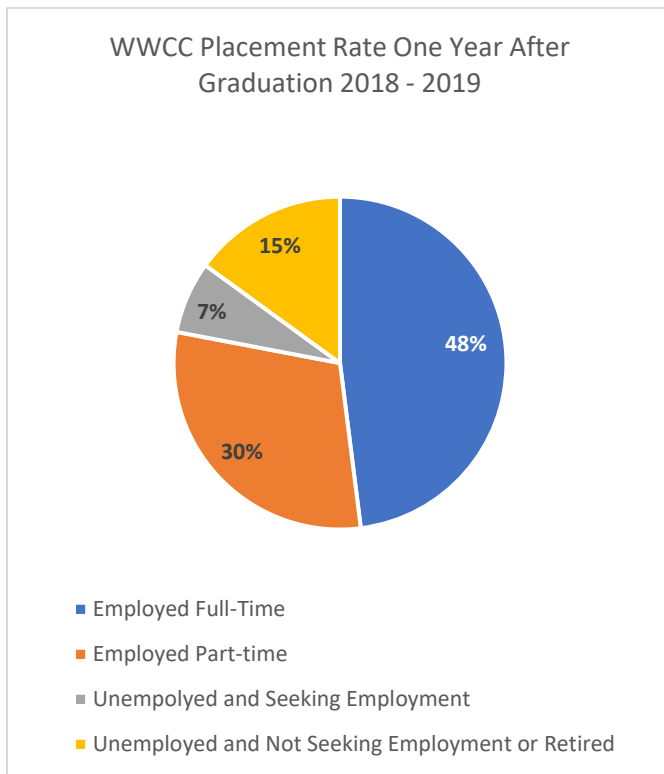
WWCC PROGRAM COMPLETIONS 2015 and 2018				
PROGRAM	2015 Program Completions	2018 Program Completions	Change	Change by %
Electrical/Electronics Equipment Installation and Repair, General	27	45	18	67%
Criminal Justice/Law Enforcement Administration	9	26	17	189%
Psychology, General	23	33	10	43%
Welding Technology/Welder	9	18	9	100%
Licensed Practical/Vocational Nurse Training	26	35	9	35%
Social Work	0	9	9	Insf. Data
Medical Radiologic Technology/Science - Radiation Therapist	2	9	7	350%
Spanish Language and Literature	0	7	7	Insf. Data
Automobile/Automotive Mechanics Technology/Technician	4	10	6	150%
Business Administration and Management, General	16	22	6	38%
History, General	1	5	4	400%
Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	0	4	4	Insf. Data
Music, General	2	5	3	150%
Engineering, General	10	13	3	30%
Information Science/Studies	0	3	3	Insf. Data
Mathematics, General	0	3	3	Insf. Data
Social Sciences, General	3	5	2	67%
Diesel Mechanics Technology/Technician	4	6	2	50%
English Language and Literature, General	4	6	2	50%
Pre-Medicine/Pre-Medical Studies	9	11	2	22%
Mechanic and Repair Technologies/Technicians, Other	22	24	2	9%
Journalism	0	2	2	Insf. Data
Ceramic Arts and Ceramics	0	2	2	Insf. Data
Pre-Law Studies	0	2	2	Insf. Data
Geology/Earth Science, General	1	2	1	100%
Anthropology	2	3	1	50%

Pre-Dentistry Studies	4	5	1	25%
Liberal Arts and Sciences/Liberal Studies	0	1	1	Insf. Data
Data Entry/Microcomputer Applications, General	0	1	1	Insf. Data
Technical Theatre/Theatre Design and Technology	0	1	1	Insf. Data
General Office Occupations and Clerical Services	0	1	1	Insf. Data
Pre-Veterinary Studies	1	1	0	0%
Registered Nursing/Registered Nurse	32	31	(1)	(3%)
Secondary Education and Teaching	8	7	(1)	(13%)
Political Science and Government, General	4	3	(1)	(25%)
Dance, General	3	2	(1)	(33%)
Pre-Physical Therapy Studies	3	2	(1)	(33%)
Chemistry, General	2	1	(1)	(50%)
Alternative Fuel Vehicle Technology/Technician	2	1	(1)	(50%)
Creative Writing	1	0	(1)	(100%)
Speech Communication and Rhetoric	6	4	(2)	(33%)
Environmental Science	2	0	(2)	(100%)
Elementary Education and Teaching	29	26	(3)	(10%)
Medical Administrative/Executive Assistant and Medical Secretary	5	2	(3)	(60%)
Nursing Education	3	0	(3)	(100%)
Biology/Biological Sciences, General	11	7	(4)	(36%)
General Studies	80	75	(5)	(6%)
Administrative Assistant and Secretarial Science, General	11	6	(5)	(45%)
Kinesiology and Exercise Science	8	3	(5)	(63%)
Receptionist	5	0	(5)	(100%)
Office Management and Supervision	9	3	(6)	(67%)
Sociology	7	1	(6)	(86%)
Industrial Mechanics and Maintenance Technology	35	27	(8)	(23%)
Drama and Dramatics/Theatre Arts, General	13	5	(8)	(62%)
Foreign Languages and Literatures, General	8	0	(8)	(100%)

Web Page, Digital/Multimedia and Information Resources Design	14	3	(11)	(79%)
Accounting	13	2	(11)	(85%)
Computer and Information Sciences, General	11	0	(11)	(100%)
Petroleum Technology/Technician	20	7	(13)	(65%)
Overall	533	547	14	3%

Source: EMSI/Wyoming Department of Employment

POST-WWCC EMPLOYMENT STATISTICS



Graduates of WWCC are surveyed at one-year post graduation to determine their employment status.

The majority of WWCC graduates surveyed in 2018 – 2019 reported that they were employed on a full or part time basis.

A minority of graduates surveyed reported that they were unemployed but seeking employment.

STUDENT PERFORMANCE

For the purposes of this report, and as directed by the 2020 – 2021 Perkins Plan developed by the Wyoming Department of Education, student performance is measured for CTE concentrators under three Federal performance indicators:

- **1P1: Postsecondary Retention and Placement**
The percentage of CTE concentrators who, during the second quarter after program completion, remain enrolled in postsecondary education, are in advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are placed or retained in employment.
- **2P1: Credit, Certificate, or Diploma**
The percentage of CTE concentrators who receive a recognized postsecondary credential during participation in or within 1 year of program completion.
- **3P1: Non-Traditional Program Enrollment**
The percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields.

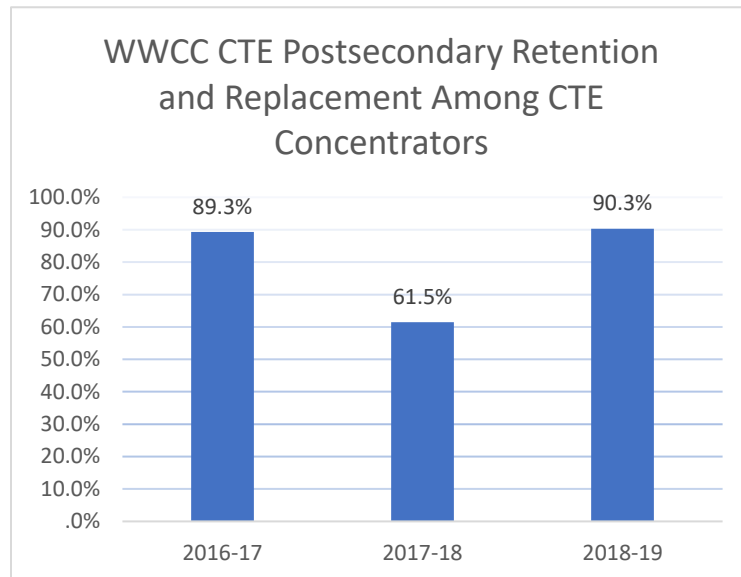
In the following pages, you will find information collected and shared as a whole for all CTE concentrators, and disaggregated by both subgroup (race/ethnicity, gender, special populations) and program of study.

WWCC CTE concentrators overall perform well in 1P1 and 2P1. In fact, in every accountability year included, concentrators achieved a postsecondary credential at a rate of 100%. Regarding non-traditional program enrollment, rates of achievement are much lower, but data does suggest that the trend is moving in an upwards direction.

When this information is disaggregated, by either subgroup or program of study, the results under a performance indicator is often the measurement of only one or two students. As a consequence, the performance of a single CTE concentrator has an incredible impact on the measurement of the whole subgroup or program of study. Additionally, not every subgroup or program of study is represented under the same performance indicator in every accountability year, so drawing conclusions about trends can be difficult.

OVERALL CTE STUDENT PERFORMANCE ON FEDERAL INDICATORS

Data Courtesy of the Wyoming Department of Education unless otherwise noted.



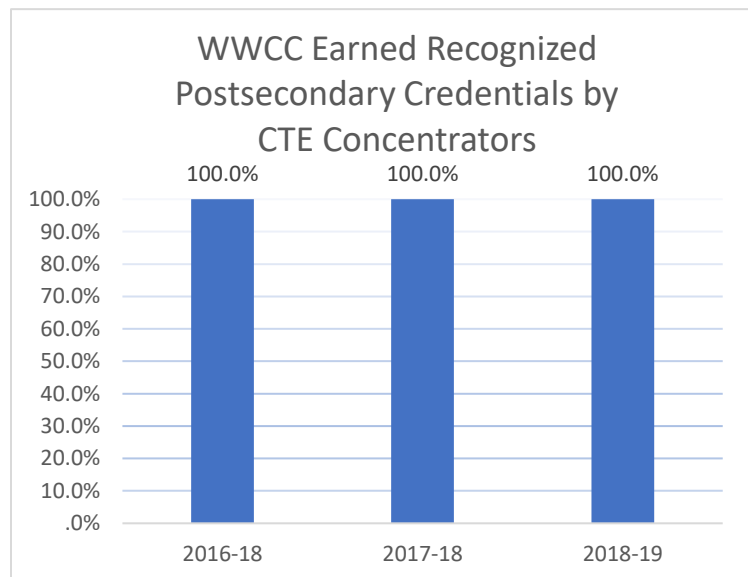
CTE concentrators at WWCC are achieving high rates of postsecondary retention and replacement.

Despite a significant decline in the rate between accountability years 2016 – 2017 and 2017 – 2018, the numbers had a sharp rebound in 2018 – 2019.

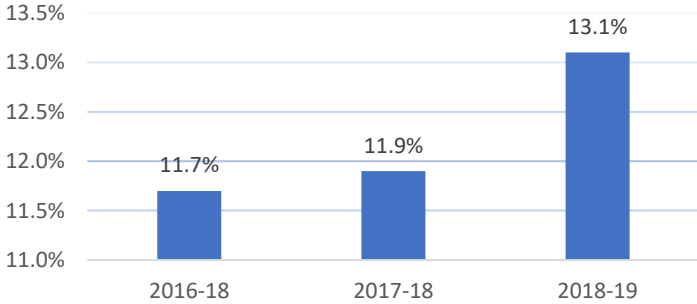
Without more accountability years included, it is impossible to determine from this data if a trend exists.

Throughout all three included accountability years, 100 % of CTE concentrators at WWCC achieved a CTE award.

CTE Awards include a certificate, diploma, an Associate of Science or Associate of Applied Science in a Perkins-eligible program.



WWCC Nontraditional Program Placement Rates Among CTE Concentrators



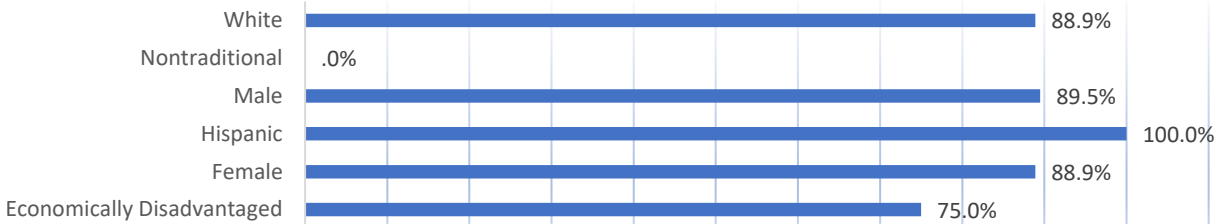
Nontraditional program placements remain low among WWCC CTE concentrators for all three included accountability years.

It is noteworthy that with every subsequent year, the rate has increased, indicating that an upwards trend may be occurring, and more students are enrolling in programs that are considered nontraditional for their gender.

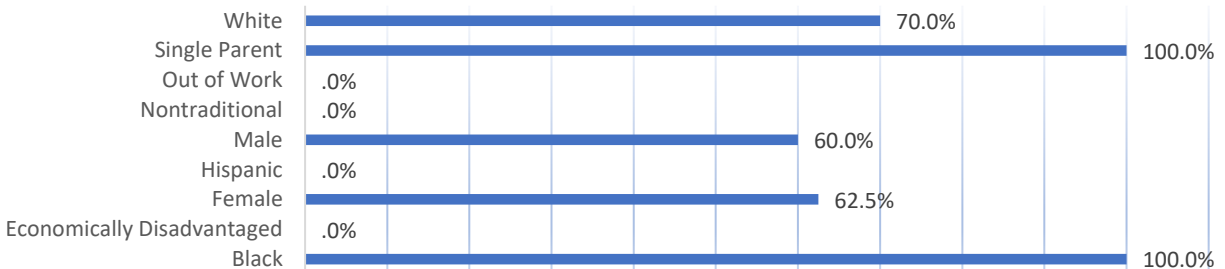
CTE STUDENT PERFORMANCE ON FEDERAL INDICATORS BY SUBGROUP

Most subgroups are performing well under this performance indicator. As was already noted, many of these subgroup categories is the measure of only one or two students.

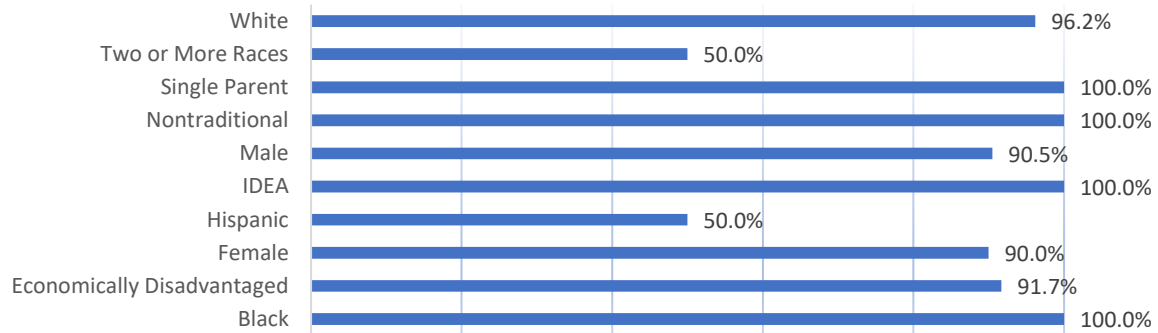
WWCC Postsecondary Retention and Placement Among CTE Concentrators by Subgroup 2016 - 17



WWCC Postsecondary Retention and Placement Among CTE Concentrators by Subgroup 2017 - 18

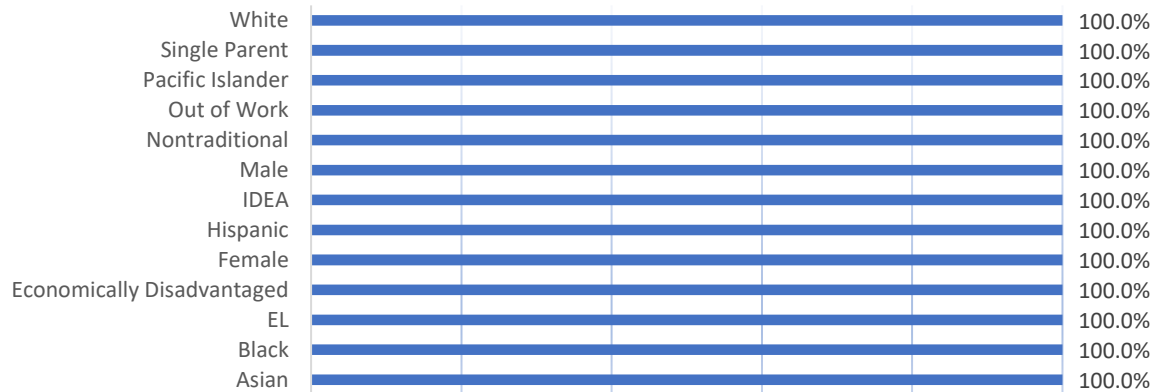


WWCC Postsecondary Retention and Placement Among CTE Concentrators by Subgroup 2018 - 19

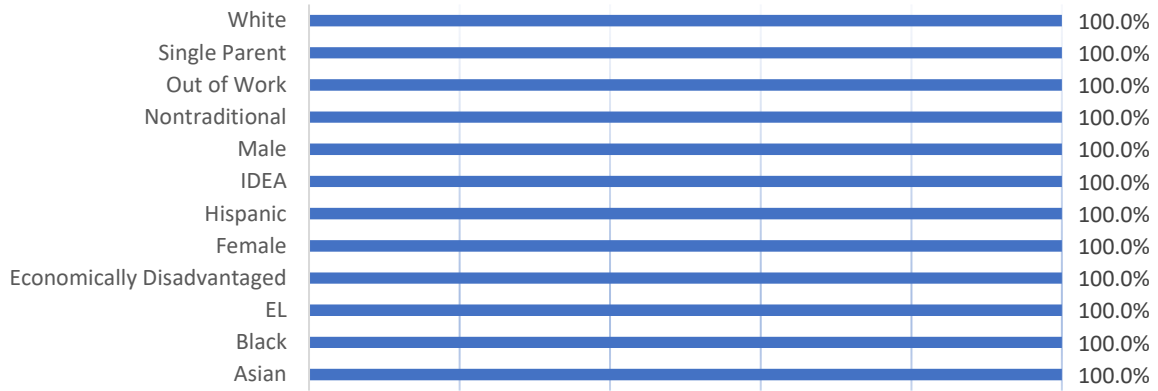


WWCC CTE Concentrators in every subgroup have earned a postsecondary credential over the last three accountability years.

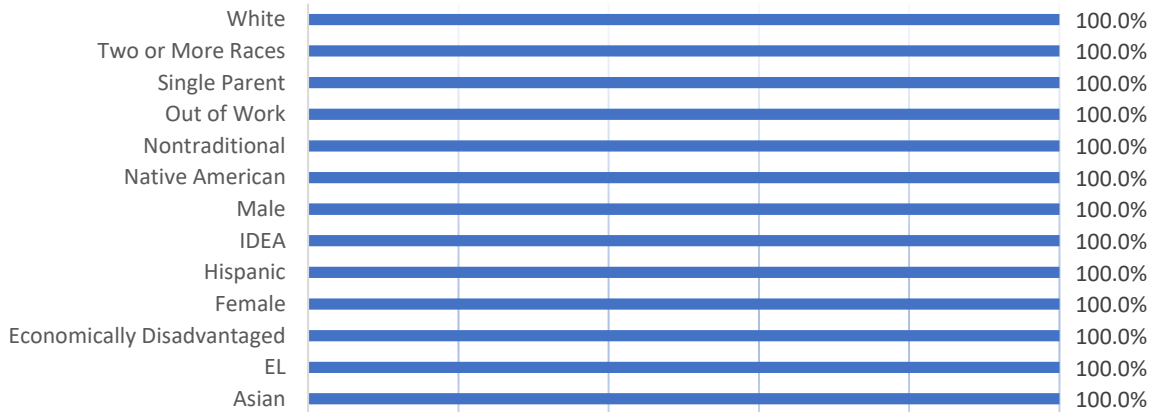
WWCC Earned Recognized Postsecondary Credentials by CTE Concentrators by Subgroup 2016 -17



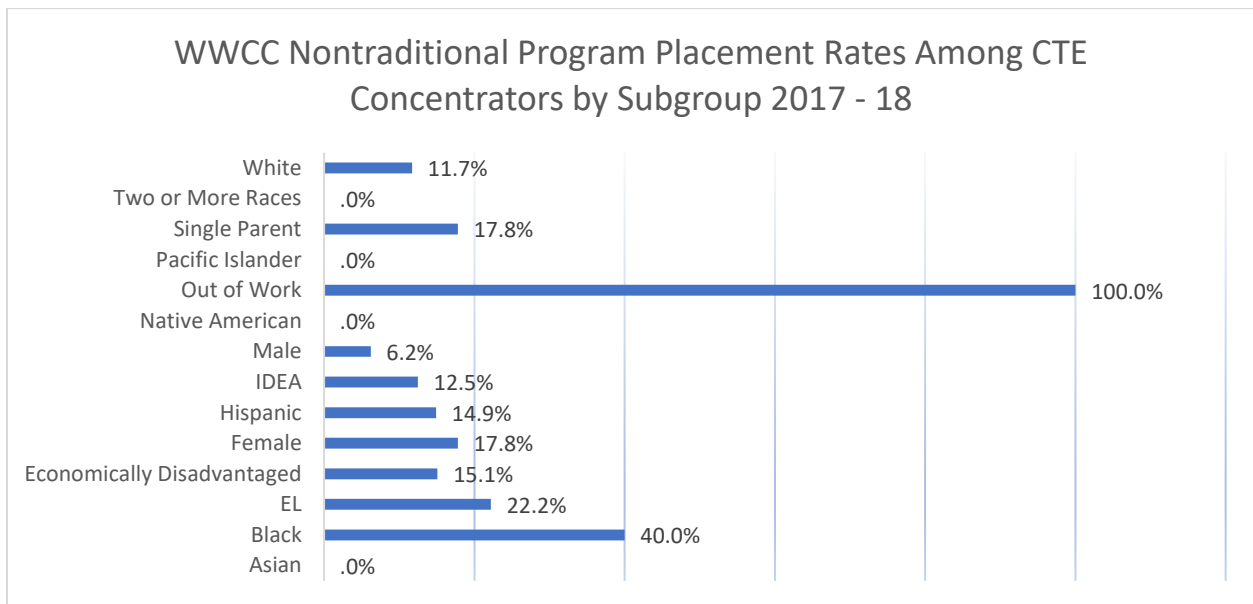
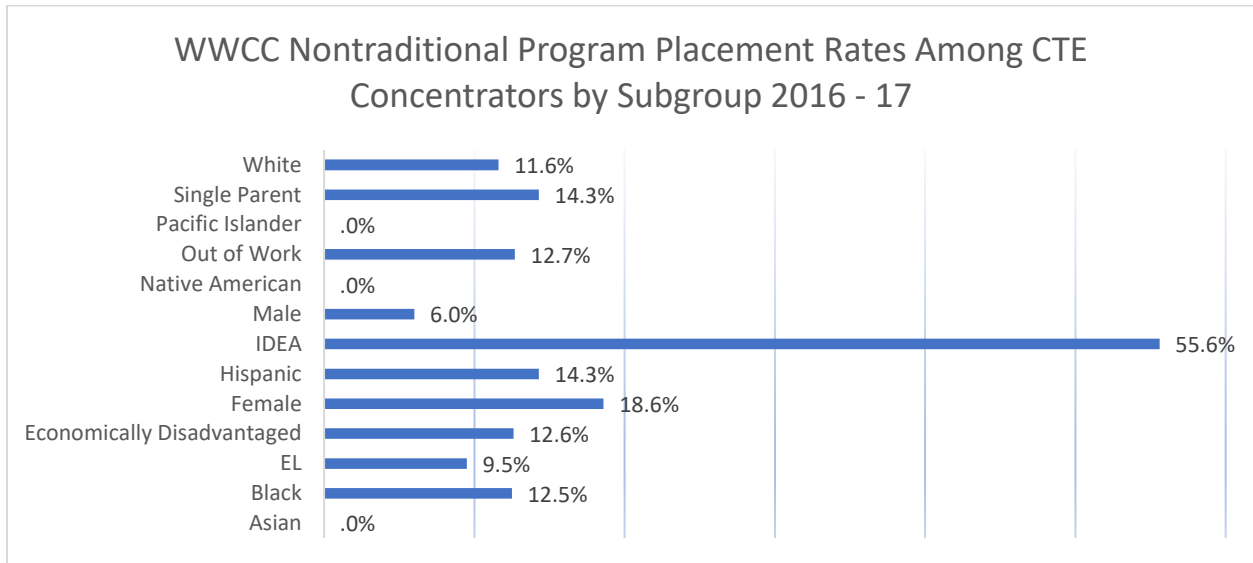
WWCC Earned Recognized Postsecondary Credentials by CTE Concentrators by Subroup 2017 -18



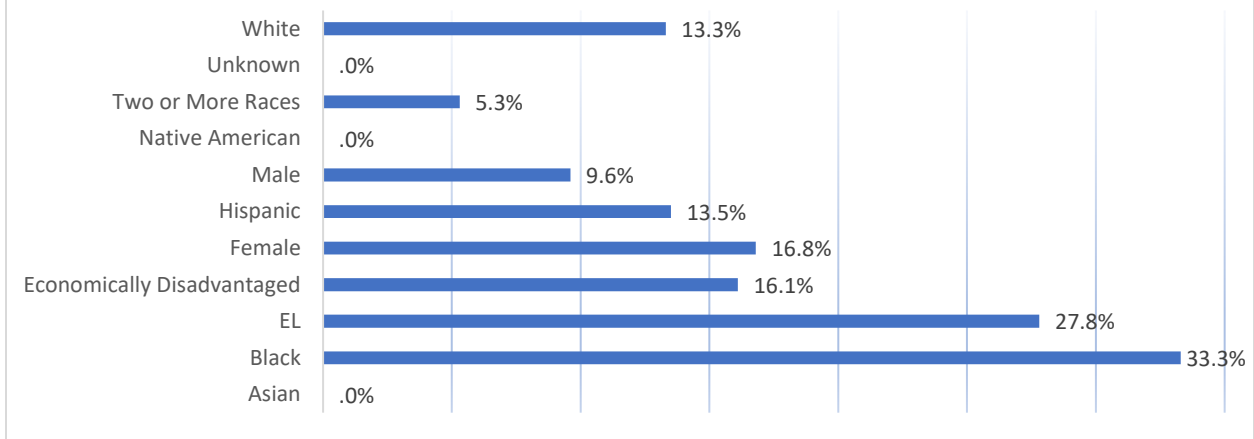
WWCC Earned Recognized Postsecondary Credentials by CTE Concentrators by Subroup 2018 -19



Disaggregated by subgroup, rates of nontraditional program placement remain low for most subgroup populations.



WWCC Nontraditional Program Placement Rates Among CTE Concentrators by Subgroup 2018 - 19



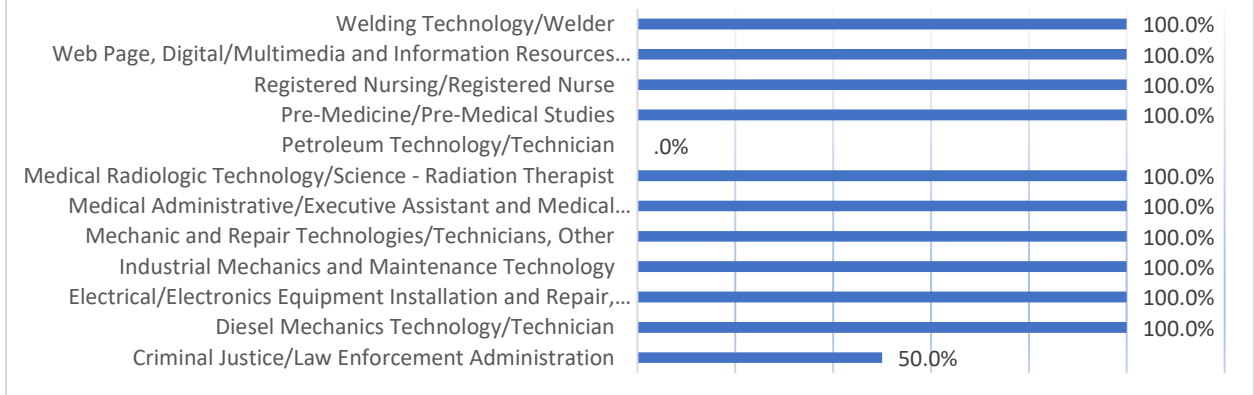
CTE STUDENT PERFORMANCE ON FEDERAL INDICATORS BY PROGRAM OF STUDY

Among most CTE programs of study, postsecondary retention and placement rates remain high for all three accountability years.

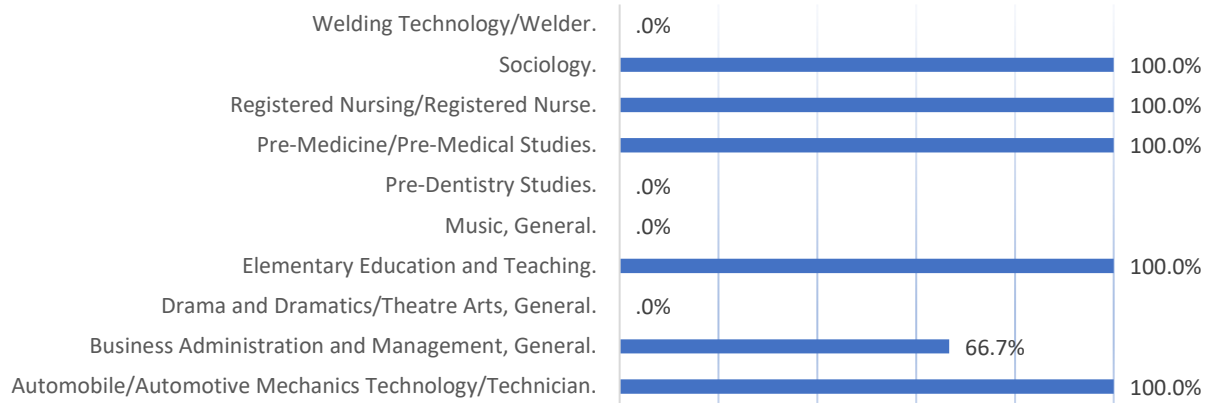
Since only a few programs appear in all three years, it is difficult to determine if trends are beginning to shape for any respective programs. Registered Nursing is the only program to appear in data from each year and maintains a 100% rate.

In each program, this is a measurement of only a few students, no more than nine in any given year, which results in extremely high rates.

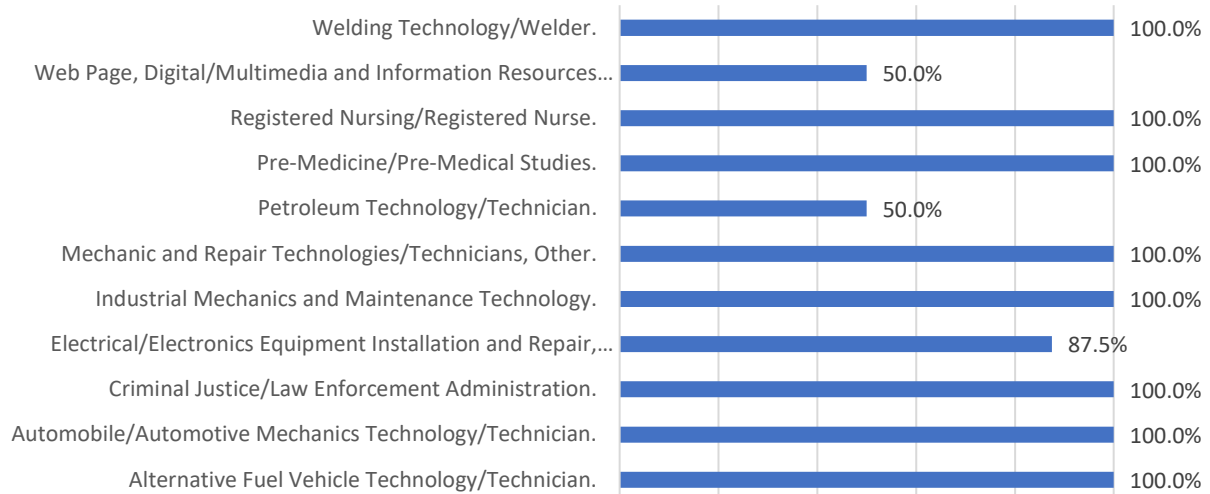
WWCC Postsecondary Retention and Placement Among CTE Concentrators by Program 2016 - 17



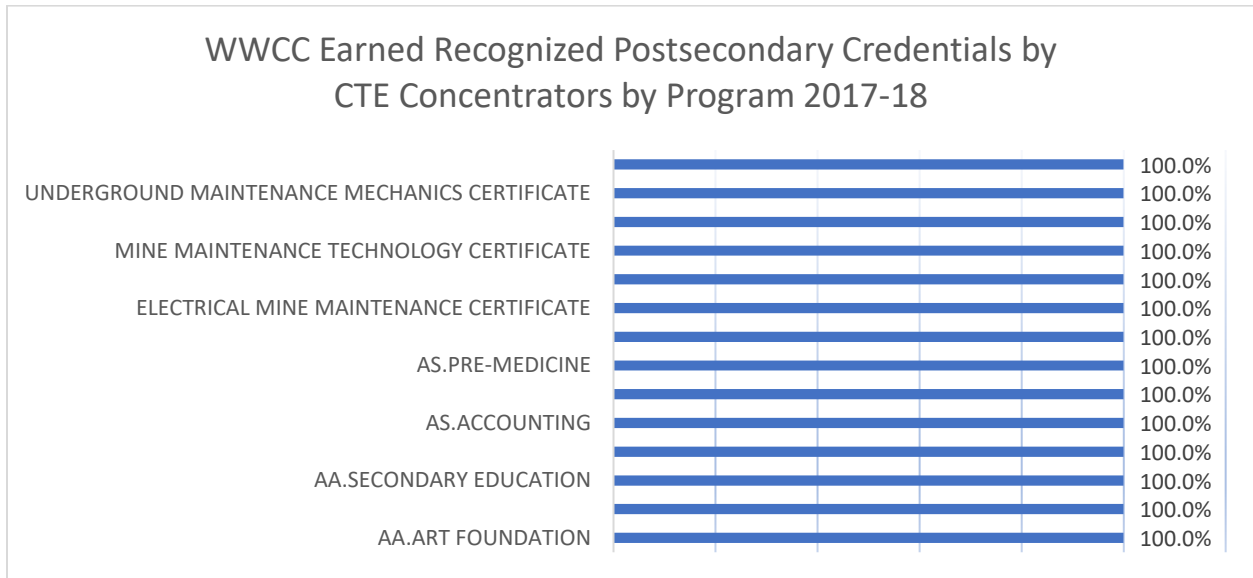
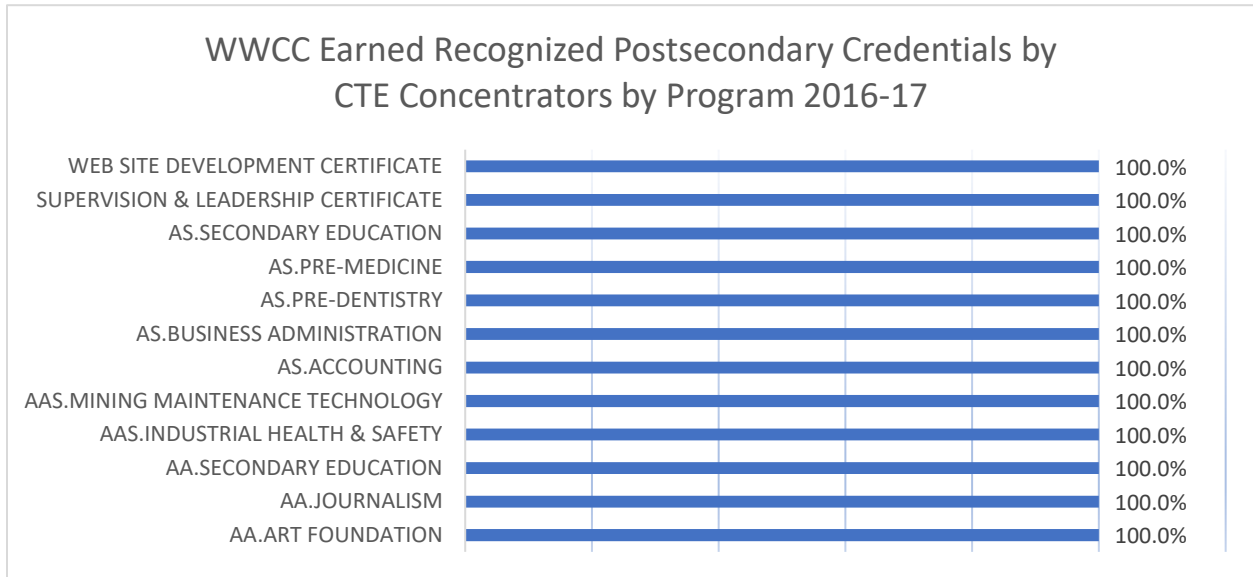
WWCC Postsecondary Retention and Placement Among CTE Concentrators by Program 2017 - 18



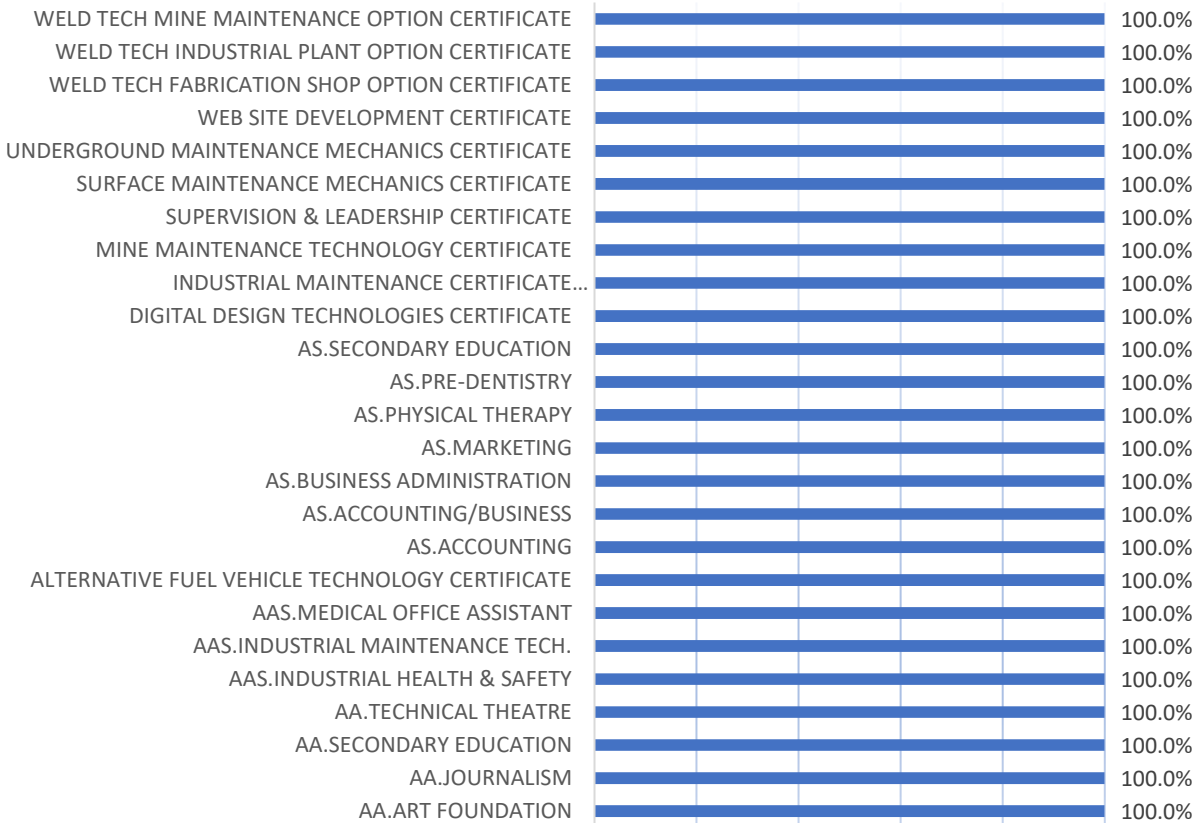
WWCC Postsecondary Retention and Placement Among CTE Concentrators by Program 2018 - 19



In all three accountability years, each program included achieved a 100% rate of postsecondary credit attainment.

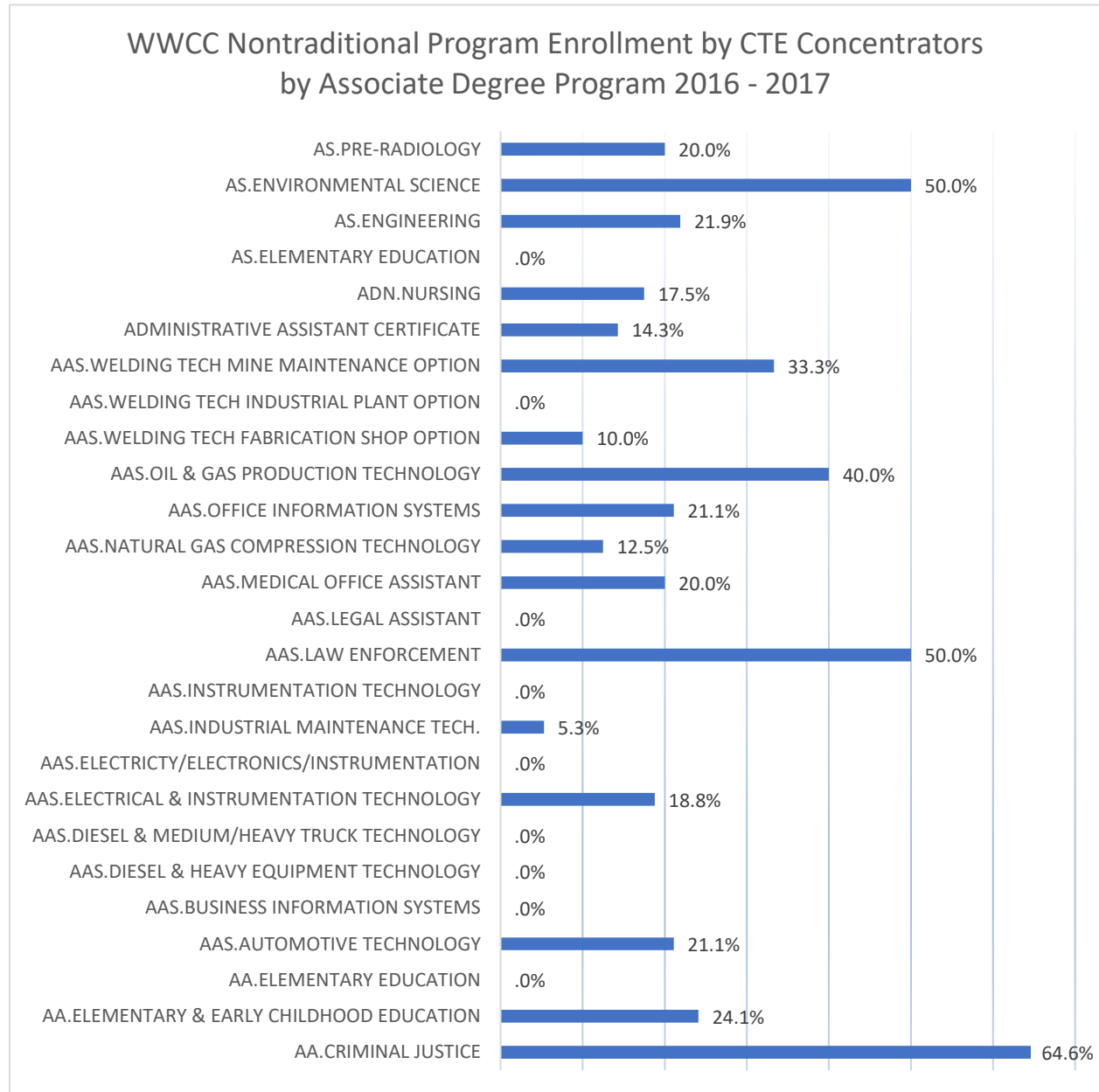


WWCC Earned Recognized Postsecondary Credentials by CTE Concentrators by Program 2018-19

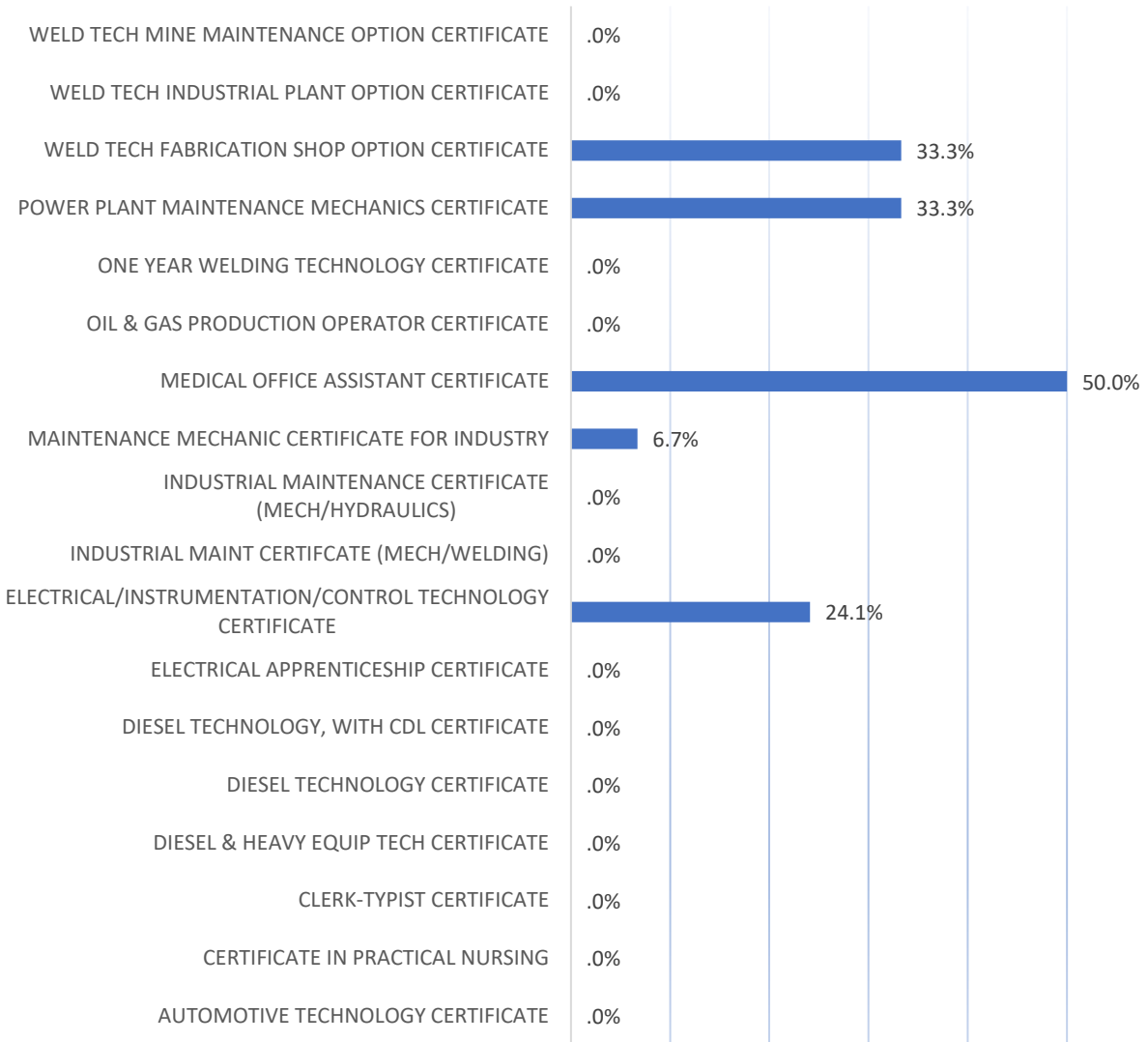


For ease of reading, non-traditional program enrollment disaggregated by subgroup has been split between associate degree and certificate programs for each accountability year.

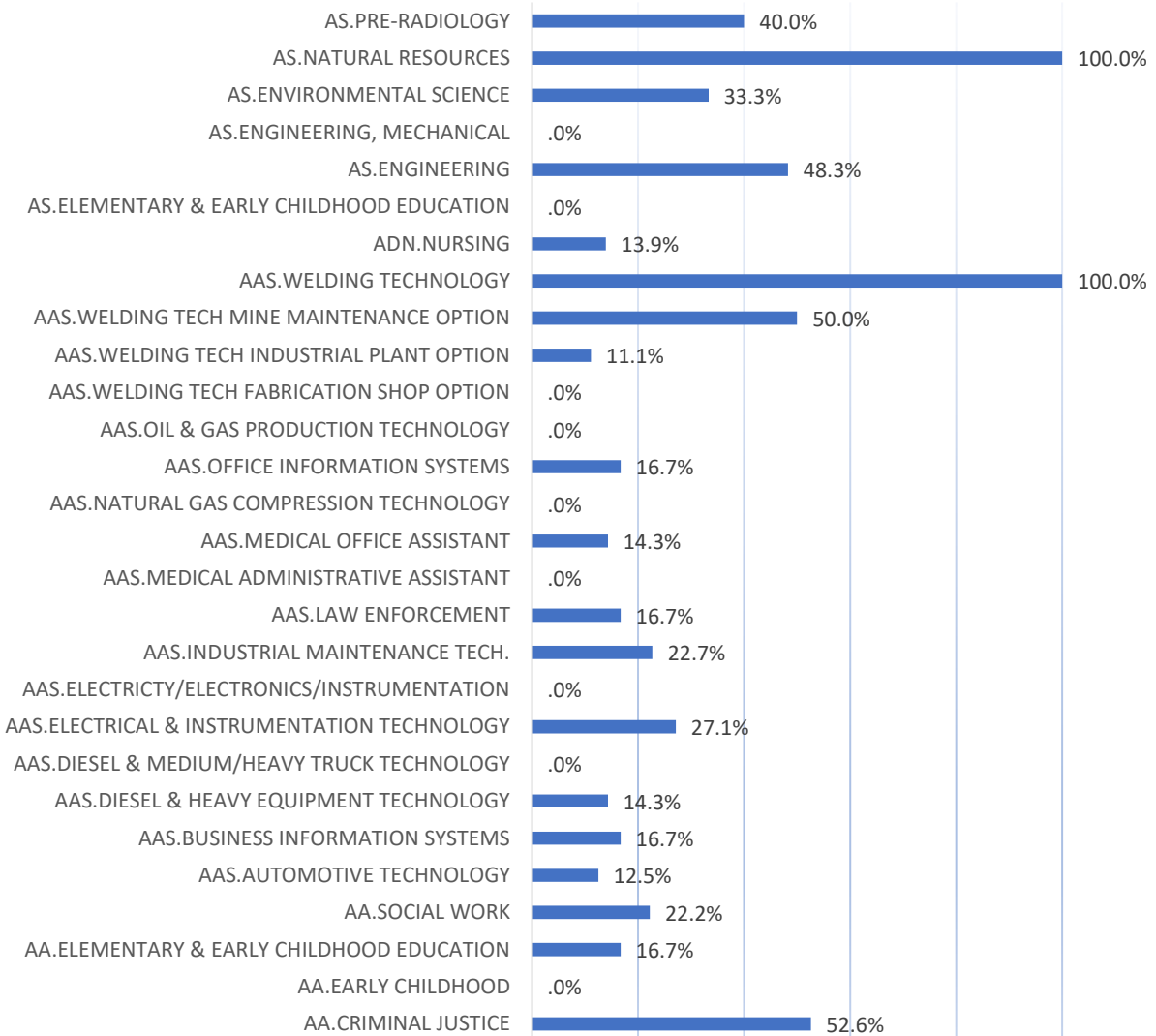
Nontraditional enrollment is more common among Associate Degree than Certificate programs.



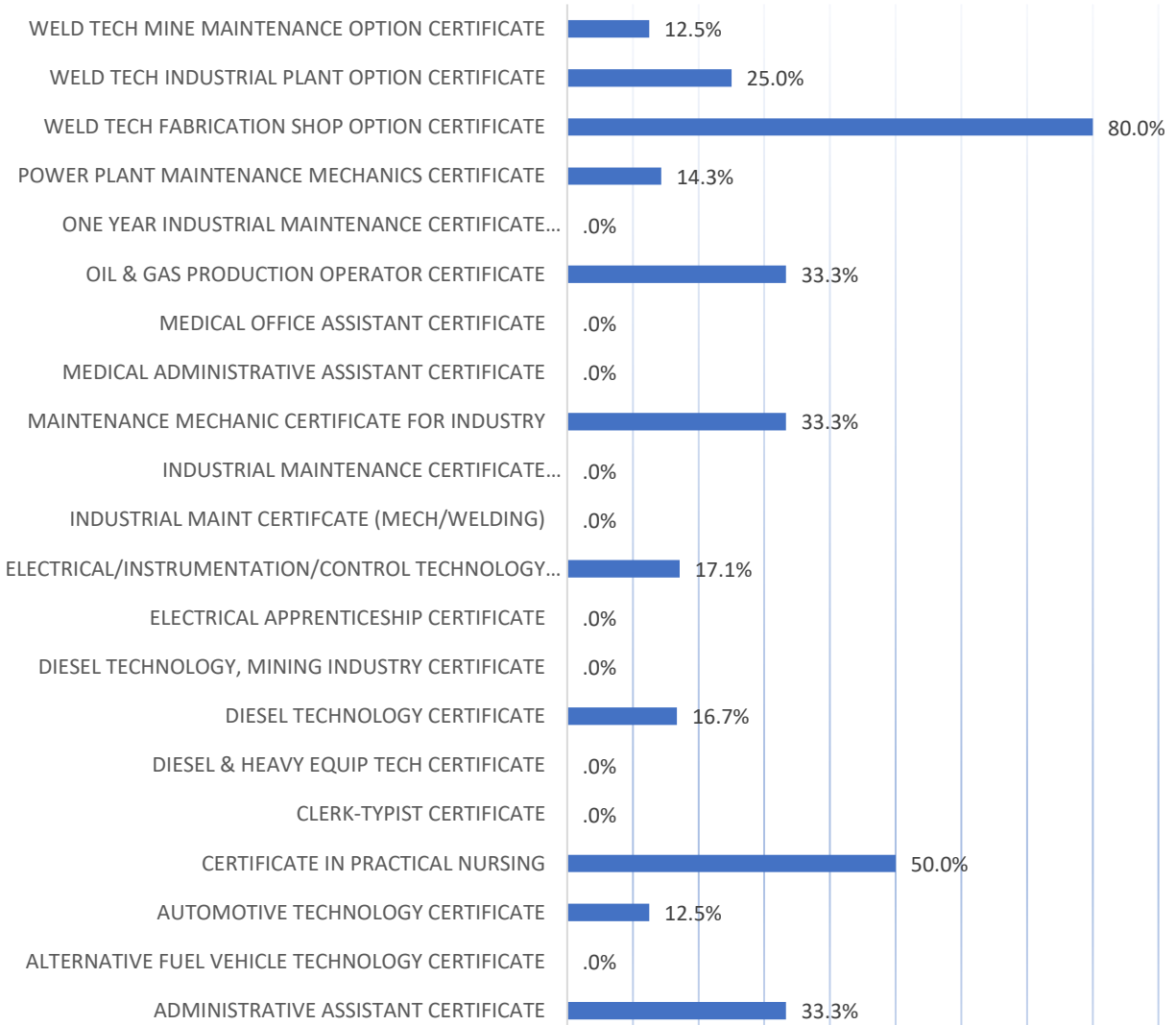
WWCC Nonradiational Program Enrollment Among CTE Concentrators by Certificate Program 2016 - 2017



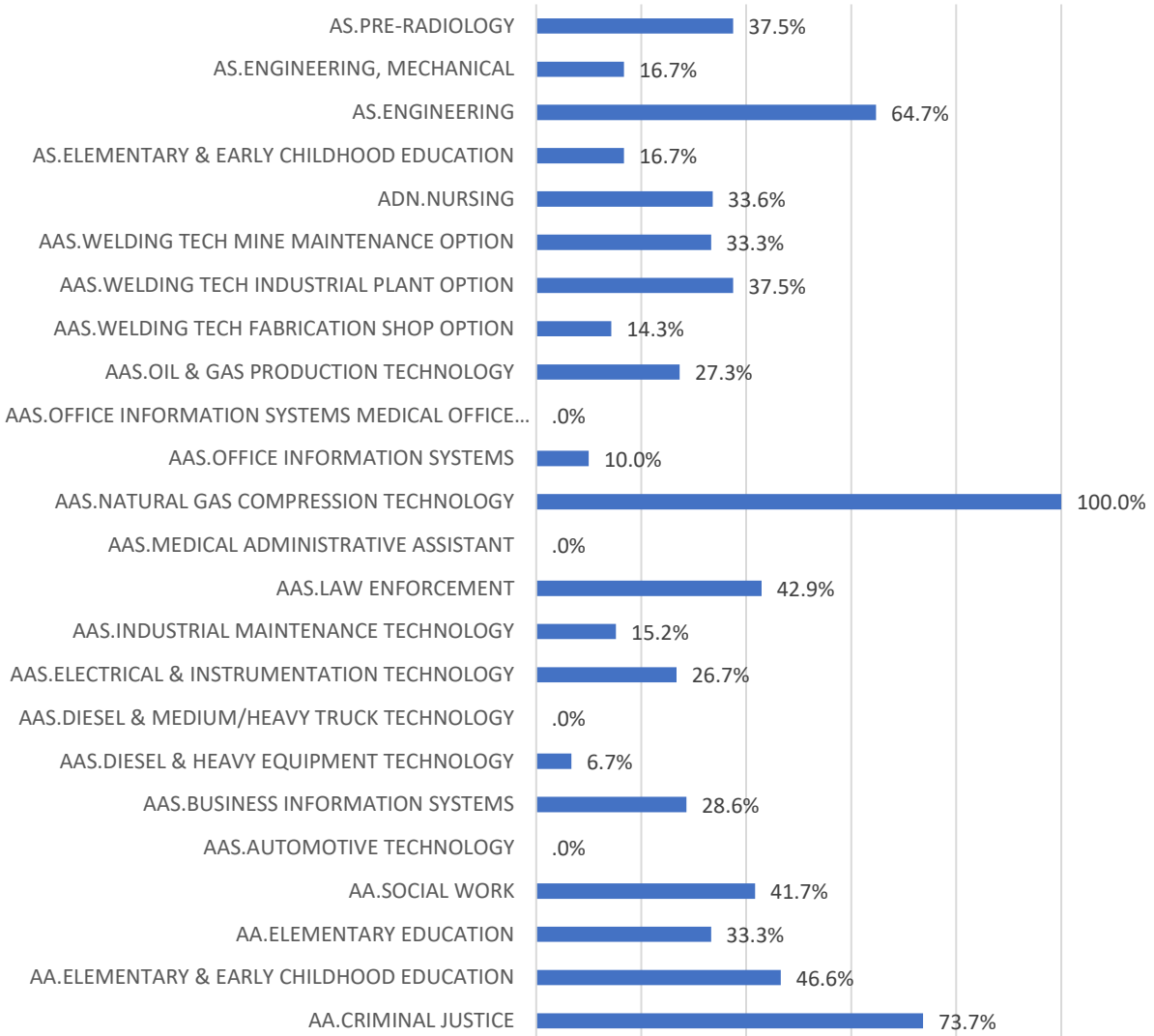
WWCC Nontraditional Program Enrollment by CTE Concentrators by Associate Degree Program 2017 - 2018



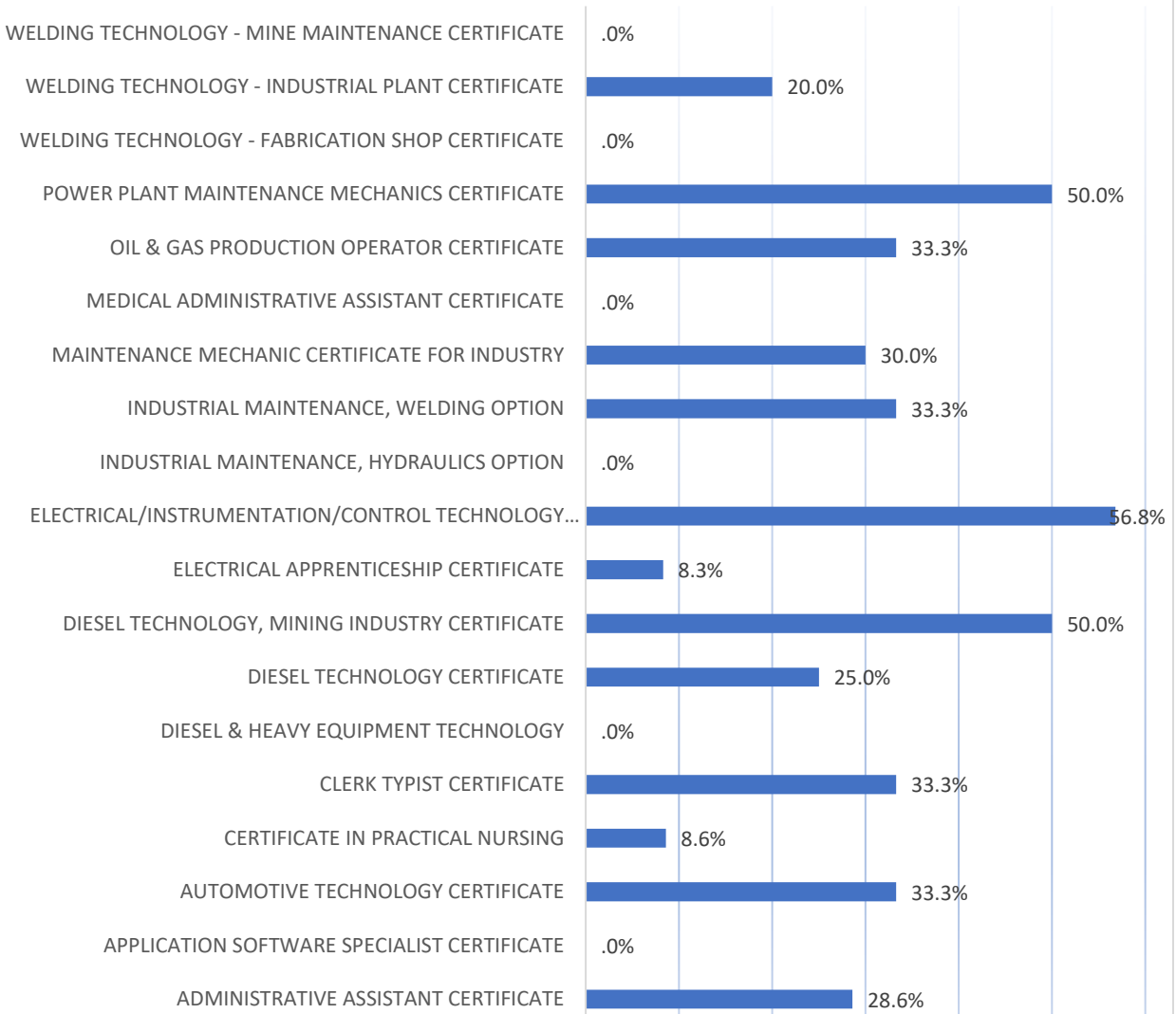
WWCC Nontraditional Program Enrollment Among CTE Concentrators by Certificate Program 2017 - 2018



WWCC Nontraditional Program Enrollment Among CTE Concentrators by Associate Degree Program 2018 - 2019



WWCC Nontraditional Program Enrollment Among CTE Concentrators by Certificate Program 2018 - 2019



KEY POINTS:

- Overall student performance by CTE concentrators is good in Postsecondary Retention and Placement, exemplary in the attainment of Credentials, Certificates, and Diplomas, and experiencing lower rates in Non-Traditional Program Enrollment.
- Non-Traditional Program enrollment is seeing improvement. While females are more likely to enroll in a non-traditional program, males are seeing more improvement with each year. Several programs of study are making forward bounds as well, including the A.S. Engineering and A.A. Criminal Justice programs.
- EL, Male, and Economically Disadvantaged CTE concentrators, respectively, are making noticeable progress in non-traditional enrollment. In each accountability year included, numbers among those groups has increased.
- Students classified as Black and as Hispanic have a higher rate of non-traditional enrollment than other subgroups identified by race/ethnicity.
- Based on the data provided, it appears that females are more likely than males to enter a non-traditional program for their gender. This could be due to the typically higher income rates related to traditionally male-dominated programs and fields.
- Non-traditional program enrollment is more common among associate degree programs than certificate programs.

CTE PROGRAMS

WWCC offers a wide variety of CTE programs for both degree and certificate seeking students. Online and distance education provide opportunities in a number of programs.

In addition to being accredited by the Higher Learning Commission, WWCC also has specialized program accreditations from commissions and organizations that help strengthen their CTE programs. They are:

- The Commission for Education in Nursing
- The American Welding Society (Accredited Testing Facility)
- The National Automotive Technicians Education Foundation
- The National Association of Schools of Music

Associate of Art, Associate of Science, and Associate of Nursing programs are designed for students interested in pre-professional study and, often, those who intend to move onto a four-year college or university.

Associate of Applied Science programs are designed to prepare students for employment and direct entry into the workforce, usually in business or industry. They offer programs in a shorter amount of time. Upon completing the degree, students may opt to transfer to a four-year or trade school program.

All degree programs require 64 credits and have a set of general education requirements that must be satisfied in order to graduate.

Certificate programs provide opportunities to build core job skills and competencies in shorter amount of time than degree program.

Courses within each program of study have met CTE approval guidelines set forth by the Wyoming Department of Education.

WWCC CTE ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS (*=Online Option)	
BUSINESS	
Business Administration	AS*
Business Management	AS
Accounting	Certificate*
Supervision and Leadership	Certificate*
Business Information Systems	AAS
Application Software Specialist	AAS
Digital Media	AAS
Medical Administrative Assistant	AAS
Administrative Assistant	Certificate
Application Software Specialist	Certificate
Digital Designs Technologies	Certificate

Social Media	Certificate
Medical Administrative Assistant	Certificate
COMPUTER SCIENCE	
Computer Science	AS
Web Development	Certificate
CRIMINAL JUSTICE	
Criminal Justice	AAS
EDUCATION	
Early Childhood Education & Elementary Education	AA/AS
Secondary English Education	AA
Secondary Social Studies Education	AA
Secondary Foreign Language Education	AA
Secondary Math Education	AS
Secondary Science Education	AS
Physical Education	AS
EMS AND PARAMEDICINE	
Emergency Medical Services	AAS
Paramedicine	AS
ENGINEERING	
Engineering, EE Specialization	AS
Engineering, Mechanical Specialization	AS
Pre-Engineering	AS
EXERCISE SCIENCE	
Exercise Science	AS
Fitness Leadership	Certificate
PRE-MED	
Pre-Dental Hygiene	Certificate
Pre-Medical Sciences	AS
Pre-Radiology	AS
INDUSTRY & TECHNOLOGY	
Automotive Technology	AAS
Student ASE	Certificate
Adult ASE	Certificate
Pro Cut Brake Lathe	Certificate
MACS Air-Conditioning	Certificate
CDL	
Diesel Technology	AAS
Electrical and Instrumentation Technology	AAS
Electrical, Instrumentation, Control Technology	Certificate
Electrical Apprenticeship	Certificate
Industrial Maintenance Technology	AS
Surface Maintenance Mechanics	Certificate
Power Plant Maintenance Mechanics	Certificate

Industrial Maintenance Technology Mechanics, Welding option	Certificate
Industrial Maintenance Technology Mechanics, Hydraulics option	Certificate
Mining Maintenance Technology	AS
Electrical Mine Maintenance	Certificate
Mining Maintenance Technology	Certificate
Underground Maintenance Mechanic	Certificate
Natural Gas Compression Technology	AAS
Natural Gas Compression	Certificate
Oil and Gas Technology	AAS
Oil and Gas Technology	Certificate
Plant Operators Technology	AS
Plant Operators	Certificate
Welding Technology, Fabrication	AAS
Welding Technology, Mine Maintenance	AAS
Welding Technology, Industrial Plant	AAS
Welding Technology, Fabrication	Certificate
Welding Technology, Mine Maintenance	Certificate
Welding Technology, Industrial Plant	Certificate
NURSING	
Nursing	AND
Practical Nursing	Certificate
VISUAL & PERFORMING ARTS	
Art Foundation	AA
Theater: Musical Theater Option	AA
Theater: Technical Theater Option	AA
Theater: Musical Theater Option	AA
Music	AA*
Dance Entrepreneurship	AAS
Dance, Entertainment Industry Focus	AA

Source: WWCC

CTE ADVISORY COUNCILS

Councils meet on a regular basis and provide the opportunity for collaboration between WWCC and business/industry leaders in the region. Feedback from members helps craft curriculums and determine which skills are in demand in the job market. Members provide recommendations in the expenditure of available funds within the program. Additionally, they provide internship opportunities, information about professional standards, and guidance on appropriate and necessary equipment for programs. Councils exist in the following areas:

- Automotive/Alternative Fuels
- BIS/Computer Science
- Business Management
- Compression Technology/Oil & Gas

- Criminal Justice
- CTE
- Diesel Technology
- Education
- Electrical/Instrumentation Technology
- EMS
- Engineering
- Exercise Science
- Nursing
- Theatre
- Welding/Industrial Maintenance/Mine Maintenance

STUDENT ORGANIZATIONS & INTERNSHIP OPPORTUNITIES

Through hands-on experience, internships, and student organizations, CTE students at WWCC have multiple opportunities to enhance, strengthen and focus skills.

Internships opportunities are available in the following programs:

- EMS – Working with a community partner agency, students begin a five-week rotation, working twelve hour shifts twice a week, gaining professional experience in a number of areas. Internships are monitored by faculty.
- Engineering – Numerous internship opportunities with local and regional business are presented by faculty and students are encouraged to independently seek opportunities.
- Exercise Science – Through practicums and job shadowing with local businesses and offices, students gain practical experience in exercise science and explore potential career paths. Students also work with community partners to prepare and engage in several community activities focuses on health and fitness.
- Automotive Technology – Internships with local businesses are arranged for students, which often lead to full-time employment following graduation.
- Industry & Tech – Students pursue internship opportunities with local business and industry. Opportunities vary by year due to industry market conditions.
- Nursing – clinicals at local health care establishments give students first-hand experience working in a professional environment with experts in the field and often lead to employment opportunities.
- Performing Arts - Students in theater and music programs have the opportunity to intern as accompanists, create sets, craft costumes, and work in the theater business office/box office, providing skill development in a number of areas within their professional pathways. Dance students provide instruction at local studios, arrange and lead community workshops and competitions, and work with local theater companies to choreograph productions.

Student Organizations:

- Engineering Science Club – Members identify, plan, and complete an engineering project over the course of the fall semester, providing hands-on experience.
- Skills USA – This student-run organization helps members to develop skills that will help when seeking professional employment. Students engage in several meetings, conferences, and competitions regionally and nationally, and volunteer locally.
- Student Nurses Association – Members are encouraged to participate in community events geared towards health, provide programs reflective of healthcare standards, and support the development of professional nursing skills.
- Students Advocating for the Arts – The organization promotes the arts at Western and provides opportunities for students to engage in activities meant to enhance college life and experience.

SECONDARY ARTICULATION AGREEMENTS

WWCC maintains articulation agreements for concurring and dual enrollment with nine of the eleven school districts in the region. These Memorandum of Understandings allow students to earn college credits while still in high school and transition to WWCC upon graduation. Additionally, college courses and programs are offered in those communities. Those school districts are:

- Carbon County School District #1
- Lincoln County School District #1 and Oyster Ridge BOCES
- Lincoln County School District #2
- Sublette County School District #1
- Sweetwater County School District #1
- Sweetwater County School District #2
- Uinta County School District #1
- Uinta County School District #4 and Valley Learning Center BOCES
- Uinta County School District #6 and Valley Learning Center BOCES

POSTSECONDARY ARTICULATION AGREEMENTS

WWCC maintains articulation agreements with several four-year colleges and universities. This allows WWCC graduates to transfer into four-year programs that recognize all general education requirements as having been completed by their associate degree. Agreements are in place with the following institutions:

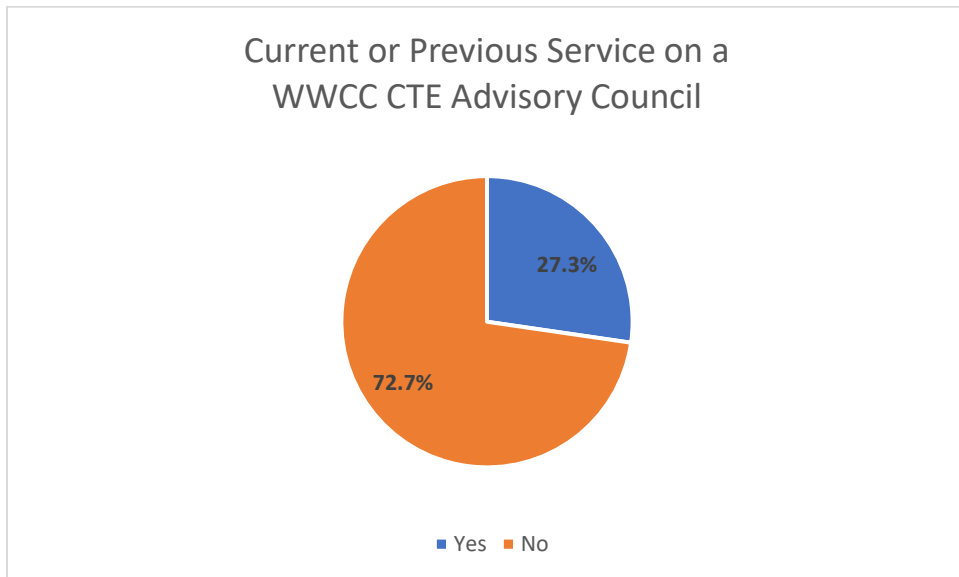
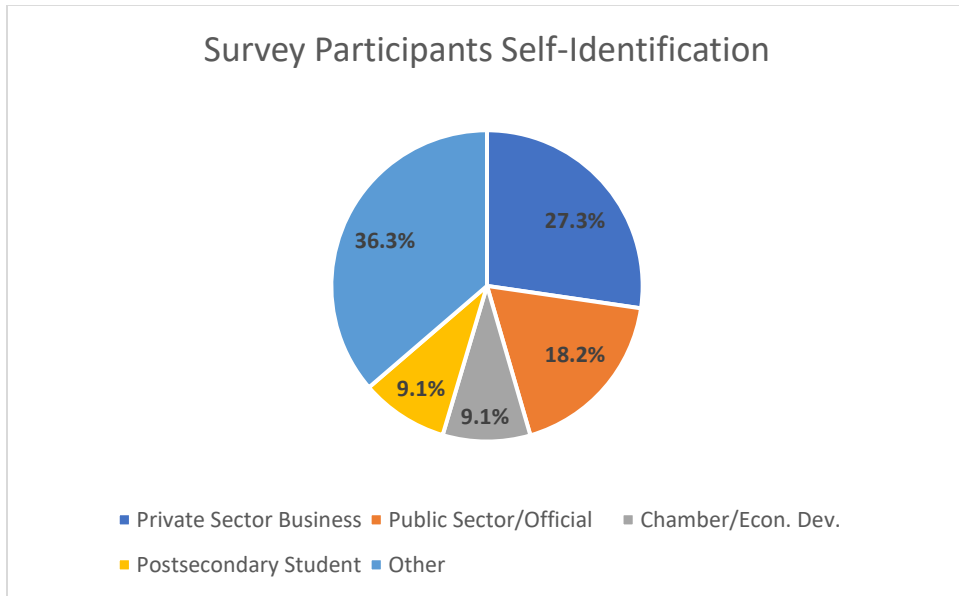
- Ashford University
- Brigham Young University
- Central Wyoming College
- Chadron State College

- Columbia College
- Franklin University
- Kaplan University
- Mayville State University
- National American University
- Regis University
- South Dakota School of Mines
- Southern New Hampshire University
- University of Wyoming
- Upper Iowa University
- Utah State University
- Valley City State University
- Weber State University
- Western Governors University

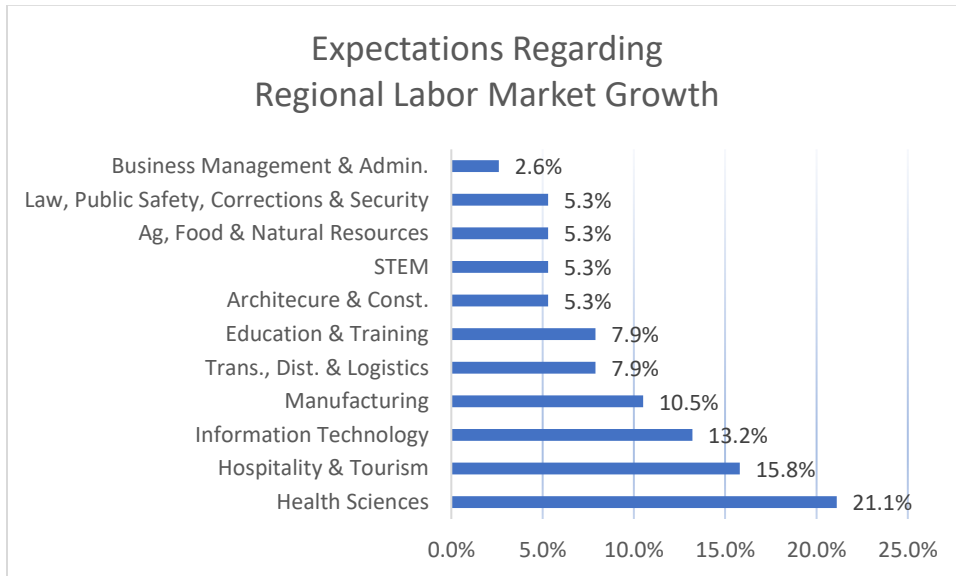
STAKEHOLDER FEEDBACK

During the months of March and April 2020, a survey regarding CTE education at WWCC was conducted among stakeholders in their service region. Participants were asked questions regarding the current and projected labor market needs, CTE alignment to labor market needs, employability skills, and access to postsecondary education.

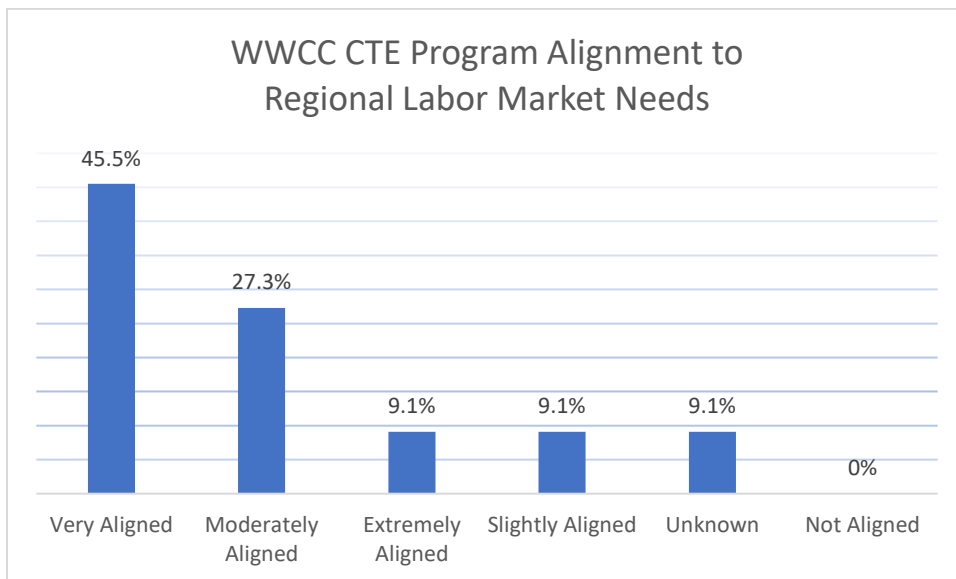
Participant Information:



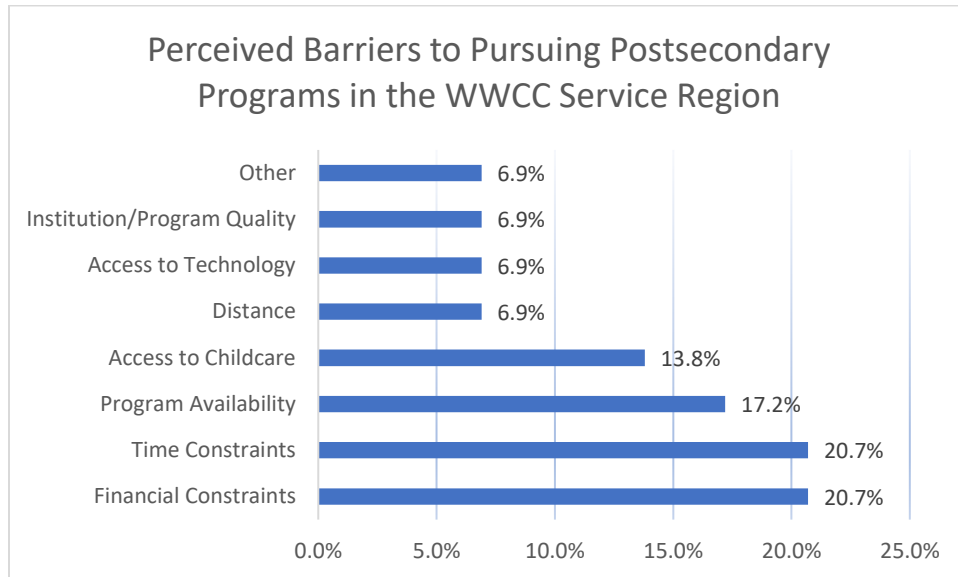
Question: To the best of your knowledge, which business/industry sectors are expected to experience growth in the region?



Question: How well are WWCC CTE programs aligned to current and projected labor market needs in the region?

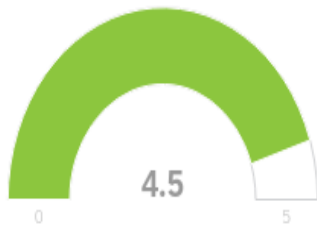


Question: What do you perceive as barriers in your region to postsecondary educational pursuits?

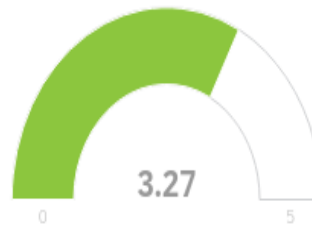


Question: Rate the importance [0 = not important, 5 = very important], in your opinion, of the following soft skills to employability.

Written/Oral Communication Skills



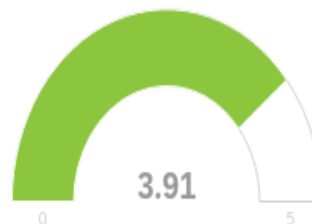
Creativity



Computer/Technology Literacy



Punctuality





Key Comments:

- It is interesting to see how generational priorities are affecting some of these soft skills related to employability. Where some like loyalty or longevity used to be very highly valued, it may matter less now. In contrast, skills such as creativity, communication, and willingness to work as a team may have risen in value.
- These programs are crucial to our community. It is important that we provide the resources they need to be successful.

CONCLUSIONS

The Perkins V: Comprehensive Local Needs Assessment (CLNA) Guidebook provided by the Wyoming Department of Education (WDE) breaks down the assessment into five sections:

- Student Performance
- Program Quality and Labor Market Alignment
- Program Implementation
- CTE Educators
- Equity and Access

Below, you will find a brief summary and conclusions in each of those areas of concern based on the provided data, and information provided by stakeholders. With this information, grant applicants can determine where and how resources are most needed within their CTE department.

STUDENT PERFORMANCE

CTE students at WWCC achieve high rates of performance under several indicators, particularly in the attainment of postsecondary credentials.

Disaggregated by subgroup, most populations are doing well. In many populations identified by race/ethnicity the sample sizes are quite small, resulting in a situation where the performance of only one or two students has a larger proportional impact on the entire group. This makes it difficult to determine where/whether performance gaps exist and identify trends. A similar situation can occur when performance data is disaggregated by program of study.

Similarly, non-traditional program enrollments are impacted by a high concentration of male-dominated industries in the regional labor market. As CTE program offerings are dictated, at least in part, by this data, many credential programs have a high proportion of males to females. There is no simple solution to improving numbers in this performance indicator.

CONCLUSIONS

- CTE students in WWCC are performing well under the included federal performance indicators. Nontraditional program enrollments are low but have shown improvement with each subsequent year.
- Nontraditional program enrollment is lower among certificate than degree programs. Taking this information into consideration when recruiting could result in higher rates of performance in this indicator.

Program Quality & Labor Market Alignment

Program growth suggests that CTE remains an attractive opportunity for many students attending WWCC. A generous offering of programs, courses, and sections within courses is generally sufficient for the demand. No population of students is prevented from entering or pursuing a program. There may be prohibitions for individuals based on health/safety restrictions and concerns.

Students at WWCC can complete full associate degree and certificate programs within the institution. Distance and online options allow site-bound and time-constrained students additional opportunities to complete a program. Academic pathways offer a clear roadmap to the completion of programs and provide faculty support.

Learning experiences extend beyond the classroom through internships, on-site state-of-the-art facilities, and project completions. Partnerships with local industry/business leaders helps to identify the skills and knowledge students need to meet labor market needs. In many cases, students are employed directly following graduation by local employers who have partnered with WWCC to offer internships and hands-on experience.

The CTE programs at WWCC are well-aligned to current and projected labor market conditions.

CONCLUSIONS:

- The portfolio of CTE programs position them well to help meet the needs of the region educationally and economically. Continuing to expand health science and education programs will further meet projected labor market needs over the next ten years.
- Increasing opportunities for internships and field experience across all programs will enhance student experience and skills.

Program Implementation

Programs at WWCC meet academic standards and incorporate skill development at multiple levels. Credit transfer and articulation agreements allow students graduating from WWCC a seamless transition into programs at four-year colleges and universities. Additionally, they are well-prepared to continue their education in a trade school.

Academic pathways provide a clear and concise roadmap to program completion while offering faculty and administrative support. Students understand that opportunities exist to change pathways and are offered relevant information to help understand how that will impact their college career regarding time, financial, and academic requirements.

Advisory councils help create collaboration and awareness about CTE programs, labor market needs, necessary skills, and industry/business standards. Through councils, program development and delivery are discussed, refined, and improved.

CONCLUSIONS

- The number of articulation/credit transfer agreements with four-year colleges and universities offer students a wide variety of options for their post-WWCC academic career. WWCC is well-positioned to expand those opportunities and provide a variety of options for students moving on to other postsecondary programs.
- Understanding labor market needs and conditions is important to program development at WWCC. Continuing to build and strengthen partnerships with industry and business leaders through advisory councils will create more awareness regarding CTE program availability and provide increased opportunities for students.

CTE Educators

WWCC employs both full and part-time faculty to provide instruction in CTE programs. These individuals provide quality, relevant, and impactful learning opportunities that develop the knowledge and skills students need to be successful in employment and/or other postsecondary programs beyond WWCC. All instructors meet the requisite requirements for degrees, certification, and work experience defined by the institution's Qualified Faculty Document that is in alignment with accrediting bodies and organizations.

For each open position, a hiring plan is developed that includes a timeline for hiring and any areas of specialty that are required/preferred among candidates. A hiring committee develops the job description. Open positions are advertised on a multiple of online job resources for higher education, in local media, and in media outlets related to the subject area. Prospective hires are invited to the campus for in-person interviews.

The onboarding process for new faculty includes attendance at an orientation program, private appointments with human resources to complete necessary paperwork, and familiarization with the school's policies and procedures, and expectations. An in-service is hosted by the Student Learning office and held for all new faculty.

In industry-related programs, many faculty members are hired directly from industry. The division chair recruits for these positions with advice and recommendations from an advisory council and private industry/business partners. To help facilitate the transition into teaching, mentorships and guidance are provided. A mentorship coordinator helps make those matches.

Professional development funds are available to all professional staff and faculty on an annual basis. Individuals identify training opportunities for consideration. Faculty are encouraged to pursue professional development and training resources.

CONCLUSIONS

- WWCC faculty and staff meet academic and certification requirements to offer instruction in their respective fields of study. Developing programs and onboarding processes specific to instructors coming from industry could serve to enhance programs and the experience for both students and teacher.

Equity and Access

The population of students at WWCC is more diverse than the regional or state population. Among CTE programs, populations along race/ethnicity, gender, and special population definitions are well-reflected. The Student Services office provides assistance in many areas, including academic tutoring and classroom, testing, and housing accommodations for individuals living with disabilities. An Accessibility Specialist provides support in determining which resources are necessary.

A variety of scholarship opportunities are available to students based on merit, program of study, and other specialized categories. The Office of Financial Aid has helped students access over \$7,000,000 in scholarships and financial aid. Additionally, individual programs monitor and advertise available opportunities for scholarships and grants.

Regionally and nationally, WWCC has been recognized for their affordability and high-quality programs.

Recruitment efforts are successful, as students at WWCC come from across the nation and globe to pursue degree programs. This creates additional diversity on campus.

There are no barriers to students pursuing or completing academic programs at WWCC.

CONCLUSIONS

- WWCC has taken measures to ensure that students have accommodations and resources they need to be successful. Ensuring students are aware of these resources is key to continuing success in this area.
- WWCC contributes to the diversity of the region through their recruitment efforts.

END