Examining the Value of Education Beyond High School in Ohio:

Central Region Profile

December 13, 2023







Introduction

Pursuit of education beyond high school is an investment of time, money, and resources. The effort to examine the value of education and training beyond high school aims for students and communities to see a return on investment for graduates that expands workforce and economic opportunities for all.

As community leaders review the data in this report, the following questions may help determine what meaning and desired next steps of inquiry or action may be helpful for the region and for Ohio:

Enrollment:

- What are education and training enrollment patterns in our region?
- How are students from low-income backgrounds and students of color participating in education beyond high school?

Access Pipeline:

- What are college going rates for high school students?
- Are they getting a head start on college while in high school?
- Are some communities and groups of students having greater challenges in accessing education and training after high school?
- What districts, organizations, and strategies are advancing access?

Completion:

- Are students in our region completing their education so that they may reap the value in the workforce?
- What communities and groups of students are far below the average in completion rates?
- Which institutions are showing excellence in completion rates for a diversity of student groups?

Post-school outcomes:

 Are graduates in our region earning an economic return on their investment in education at our public adult technical centers, colleges, and universities? In which institutions are students seeing an economic return?

Alignment to industry:

- What are the growing jobs and industry sectors in our region?
- Are the growing jobs paying median wages above the state median?
- Is our region producing graduates in those growing jobs and the priority industry sectors?
- Are some populations underrepresented within our region among those completing education in the industry sectors?

Central Ohio Demographics

Central Ohio encompasses eleven counties - Delaware, Fairfield, Franklin, Knox, Licking, Logan, Madison, Marion, Morrow, Pickaway, Union—as defined by Jobs Ohio. Central Ohio is home to 19% of Ohioans. As of 2020, 73% of Central Ohio residents identified as White, 15% as African American/Black, 4% as Hispanic/Latina/o/x, 4% Asian, 3% as two-or more races, and less than 1% as Indigenous/ American Indian². The Central region's population age 25 and up had one of the highest levels of education

¹ MapJobsOhioNetwork.pdf (ohiolmi.com)

² US Census Bureau, American Community Survey 2020

attainment compared with other Ohio regions, with 8% having an associate degree, 23% a bachelors, and 13% a graduate or professional degree.

Enrollment and Access Beyond High School

Matching data from the National Center for Education Statistics College Navigator³ and the Postsecondary Value Equitable Value Explorer⁴, this summary defines the Southwest Region as home to 45 public and private institutions offering degrees and post-high school certificates. These include 19 proprietary (for-profit) institutions, 14 private institutions, and 12 public institutions.

UNDERGRADUATE ENROLLMENT

In the Central region, there were 12,767 students (sub-baccalaureate certificates, associate, and baccalaureate programs) enrolled in proprietary institutions, 27,537 students enrolled in private institutions, and 115,538 students enrolled in public institutions in 2018-2019.⁵ The largest institutions overall were Ohio State University-Main Campus (50,053 students) and Columbus State Community College (46,559 students), which were both public, followed by Franklin University (6,193 students), which is private. The largest proprietary institution in the region was Hondros College of Nursing (3,233 students). Public institution enrollments are shown in Table 1. The institutions are categorized by the predominant award issued according to the Postsecondary Value Explorer tool. Please note that this may not be the highest award offered.

DISAGGREGATED DEMOGRAPHIC ENROLLMENT

In the Central region, the percentage of Pell recipients in 2017-2018 ranged from 34% - 97% at proprietary institutions, 10% - 64% at private institutions, and 20% - 74% at public institutions. Fourteen of the 19 proprietary institutions had over 50% of their enrollment receiving Pell grants, and three of the 14 private institutions had over 40% of their enrollment receiving Pell grants. Four of the 12 public institutions had 50% or more of their enrollment receiving Pell grants.

Eight of the nineteen proprietary institutions had more than 50% of their enrollments as students of color. The private institution with the largest population of students of color was Valor Christian with 33% of students identifying as Black and 15% as Hispanic. Ohio Dominican and Ohio Christian had 27% and 25% of students identifying as Black, respectively. Public institutions with the largest populations of students of color included Adult and Community Education-Hudson (85% Black) and Columbus State Community College (20% Black, 5% Hispanic). See Table 1.

While proprietary schools have some of the higher proportional enrollments of students of color and students receiving Pell, they enroll a smaller percentage of students in the region. For reference, Ohio State University - Main Campus enrolled around 10,000 Pell recipients and around 9,000 students of color. Columbus State enrolled around 13,000 Pell recipients and around 14,000 students of color.

³ College Navigator - National Center for Education Statistics

⁴ Equitable Value Explorer - Postsecondary Value Commission

⁵ Enrollment data sourced from Equitable Value Explorer - Postsecondary Value Commission which used 2018-2019 cohort data from IPEDS.

Table 1. Central Ohio Public Postsecondary Institutions by Enrollment, Estimated Annual Net Price, % Pell, and % Students of Color

	Public Institutions	Undergraduate Enrollment	Estimated Annual Net Price	% Pell	% Students of Color ⁶	Overall Post- School Median Earnings ⁷
Predominantly Certificates	Adult and Community Education-Hudson	165	-	74%	85%	\$48,734
	Career and Technology Education Centers of Licking County	533		22%	7%	\$36,617
	Columbus State Community College	46,559	\$13,199	28%	30%	\$41,374
	Eastland-Fairfield Career and Technical Schools	171		66%	19%	\$40,018
	Knox County Career Center	426		32%	5%	\$38,655
	Tri-Rivers Career Center	231		53%	6%	\$47,555
Predominantly Associates	Central Ohio Technical College	5,232	\$14,806	33%	16%	\$39,803
	Marion Technical College	3,096	\$9,695	26%	11%	\$41,819
	Ohio State University-Marion Campus	1,444	\$19,181	37%	14%	\$63,285
	Ohio State University-Newark Campus	3,300	\$20,259	39%	24%	\$63,285

⁶ This variable is a summation of the counts for students identifying as Asian, Black, or Hispanic race. The variable "additional races" was not included because it seemed to include missing data.

⁷ The earnings data was obtained from the Equitable Value Explorer - Postsecondary Value Commission. Median earnings used in the Equitable Value Explorer tool are based on median earnings measured 10 years after students who received federal financial aid enter an institution, collected most recently in calendar years 2014 and 2015 for students who first enrolled between 2004 and 2005. Earnings measured at 6 and 8 years after enrollment are also available for cohorts that first enrolled in 2008 and 2009, and 2006 and 2007, respectively. A data limitation is that regional and main campuses are aggregated in earnings reports.

	Ohio University- Lancaster Campus	4,328	\$14,910	50%	8%	\$63,285
Predominantly Bachelors	Ohio State University-Main Campus	50,053	\$20,573	20%	18%	\$63,285

Data Source: Equitable Value Explorer

NINTH GRADE COHORT COLLEGE GOING RATE BY ECONOMIC STATUS, RACE, & GENDER

Data from 2013-2014 and 2014-2015 cohorts show that overall, 61% of the region's students are estimated to have entered college or formal technical training within two years of high school graduation. Students identified as economically disadvantaged or Hispanic/Latinx are going to college at a rate between 15-19 percentage points lower than the average college going rate for their class cohorts. Students identified as African American are going to college at a rate of around 6-7 percentage points lower than the average college going rate for their class cohorts. Males are also more than 10 percentage points behind females.

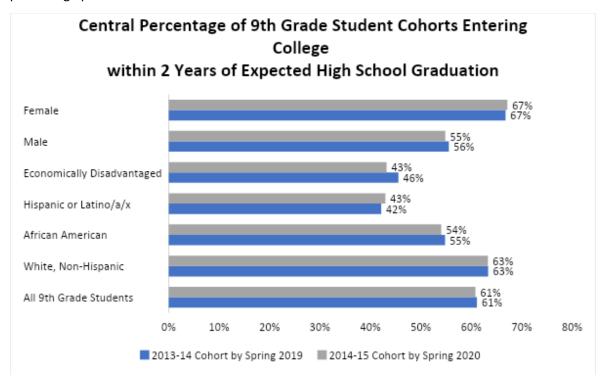


Figure 1. Central Percentage of 9th Grade Student Cohorts Entering College within 2 Years of High School Graduation

Data Source: Ohio Department of Education, Special Tabulation, presented by Education First to Ohio Excels - Ohio Excels Regional Convening, October 12, 2022. [PowerPoint slides]. Note: Sub-group results based only on counties in which student counts exceed 10.

COLLEGE CREDIT PLUS/DUAL ENROLLMENT & AP CREDIT

The Central Region is home to 67 public K-12 school districts. The district Advanced Placement (AP) participation rates, AP exam scoring levels, and dual credit participation rates are summarized in Table 2. In most districts, less than 25% of students are earning college credit while in high school. The percentage of students who score 3 or above on the AP exam is less than 25% in 52 districts. There were a dozen K-12 school districts in the Central Region that had 50% or more of their graduating cohorts scoring a 3 or higher on an AP exam or receive at least 3 dual enrollment credits during the 2020-2021 or 2021-2022 academic years. Several districts in small towns with low poverty, according to Ohio Department of Education Typology⁸, had a higher percentage of students taking advantage of college credit opportunities: Jonathan Alder Local, Johnstown-Monroe Local, Northridge Local (Licking) and Pleasant Local. Reynoldsburg City, Marysville Exempted Village, and Big Walnut Local are suburban districts with low poverty rates. The remaining districts are suburban with very low poverty rates: -Bexley City, Grandview Heights City, Olentangy Local, New Albany-Plain Local, and Upper Arlington City.

Table 2. Summary of Central Ohio K-12 School District AP Participation, AP Scoring Rates, and Dual Credit Earning Rates

Number of K-12 districts in Southwest Region with	Taking an AP course (21-22)	Scoring a 3 or higher on an AP exam (21-22)	Earning 3 or more dual credits (20-21)	Earning 12 or more dual credits (21-22)
75% or more of students	2	1	1	0
50-74% of students	6	4	8	1
25-49% of students	21	10	33	10
Less than 25% of students	38	52	25	56

Data Source: District Prepared for Success and College, Career, and Work Readiness Data from State Report Cards

Regional Access and Success Strategies

Scholarship resources are available through a variety of programs and foundations. I Know I Can provides college access and career exploration supports to Columbus City Schools, Reynoldsburg Schools, South-Western City Schools, and Whitehall City Schools. A Call to College supports college access in Newark. United Way of Marion County is also active in college access having participated in the Ohio Department of Higher Education's Three to Get Ready and Four to Go access and enrollment program.

The City of Columbus is piloting the Columbus Promise program to cover tuition, fees, and up to \$500 per semester in educational expenses to all Columbus City Schools graduates from 2022-2024 who attend Columbus State Community College.

Several strategic workforce development coalitions are operating in the region. Columbus State Community College and the ESC of Central Ohio are co-leading an evolving compact of education, business, and community partners for educational attainment and workforce development.

⁸ https://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Typology-of-Ohio-School-Districts

Completion

This brief looked at completion among various populations at public institutions. Graduation rates are over 65% for the region's Ohio Technical Centers and Ohio State University's main campus as shown in Table 3. Pell recipients met or exceeded the average graduation rate for Career and Technology Education Centers of Licking County, Knox County Career Center, Marion Technical College, Ohio State University-Marion, and Tri Rivers Career Center. The graduation rate among Pell recipients was five percentage points or more below the average at Columbus State Community College, Ohio State University-Newark, and Ohio State University-Main.

Disaggregated data by race were not available for the Ohio Technical Centers. Graduation rates among Black or African American students were lower than the overall graduation rate for all public institutions of higher education. Graduation rates for Hispanic students in relation to the overall average varied among institutions; rates for Hispanic students were equal to or greater than the overall average at the Central Ohio Technical College.

Table 3: Southwest Ohio Graduation Rates within 150 Percent of Normal Time for Public Institutions, 2021

	Public Institutions	Overall Graduation Rate	Graduation Rate, Pell Only	Graduation Rate, Black or African American	Graduation Rate, Hispanic	Graduation Rate, White
Predominantly Certificates	Adult and Community Education- Hudson	93%	92%			
	Career and Technology Education Centers of Licking County	72%	77%			
	Columbus State Community College	28%	11%	19%	17%	31%
	Eastland- Fairfield Career and Technical Schools	84%	82%			
	Knox County Career Center	67%	67%			
	Tri-Rivers Career Center	75%	80%			

	Public Institutions	Overall Graduation Rate	Graduation Rate, Pell Only	Graduation Rate, Black or African American	Graduation Rate, Hispanic	Graduation Rate, White
Predominantly Associates	Central Ohio Technical College	30%	26%	25%	33%	30%
	Marion Technical College	31%	35%	10%	0%	34%
	Ohio State University- Marion Campus	15%	17%	0%	13%	17%
	Ohio State University- Newark Campus	30%	21%	17%	26%	35%
	Ohio University- Lancaster Campus	14%	12%	0%	8%	16%
Predominantly Bachelors	Ohio State University-Main Campus	88%	81%	79%	84%	89%

Data Source: National Center for Education Statistics Integrated Postsecondary Education Data System

The graduation rates at regional two-year campuses and community colleges can be reviewed in the context of a three-year success rate which considers transfer and persistence rates in addition to completion rates. Institutional review of the disaggregated data by Pell eligibility and race/ethnicity will complement this analysis. See Table 4.

Table 4: Three Year Success Measure Components for Southwest Ohio Public Two-Year Institutions, Fall 2018 Entering Cohort, 2021

Sector Institution	% Earned degree by end of third year	% Persisting at same institution in FY 2021	% Persisting at a different institution in FY 2021
Central Ohio Technical College	28%	16%	9%
Columbus State Community College	20%	27%	10%
Marion Technical College	44%	18%	5%
Ohio State University-Marion Campus	22%	47%	9%
Ohio State University-Newark Campus	28%	32%	12%
Ohio University-Lancaster Campus	13%	38%	10%

Data Source: Ohio Department of Higher Education

Post-School Outcomes

Central Ohio colleges reporting the highest overall median earnings include Chamberlain University-Ohio (\$88,622), Mount Carmel College of Nursing (\$70,045), and Kenyon College (\$68,643). Overall earnings for proprietary institutions ranged from \$21,982 (Ohio State College of Barber Styling) to \$88,622 (Chamberlain University - Ohio) and from \$40,594 (Rosedale Bible College) to \$70,045 (Mount Carmel College of Nursing) for regional private institutions. Overall median earnings for public institutions ranged from \$36,617 (Career and Technology Education Centers of Licking County) to \$63,285 (Ohio State University – all campuses) as shown in Table 1 on page 2. A limitation to the earnings for public institutions is that regional and main campuses are reported aggregately.

Public institutions in the Central region reported overall median earnings over \$30,000. This was also true for eight proprietary institutions that reported earnings and all thirteen of the private institutions that reported earnings. All the public two-year and four-year institutions have positive earnings compared to Threshold 0, which was defined by the Equitable Value Explorer Tool as the minimum economic return to see earnings over time that would be above what an individual who only completed high school received. Threshold 0 was not available for the Ohio Technical Centers because net price was not available in the dataset.

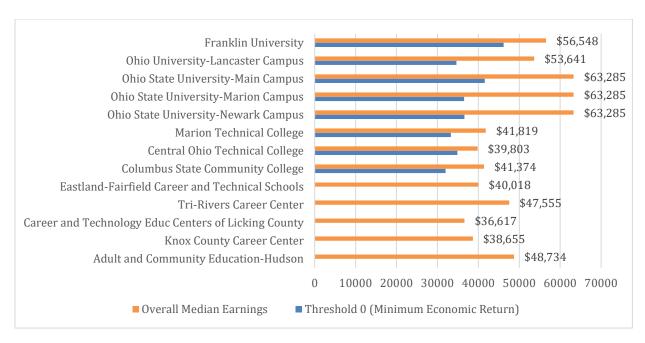


Figure 2. Overall Median Earnings and Earnings Relative to Threshold 0 for Central Ohio Public Institutions Source: Equitable Value Explorer. Note that regional and main campuses earnings are reported aggregately.

Industry

The State of Ohio Governor's Office of Workforce Transformation in partnership with the InnovateOhio Platform's Data Analytics team has created a Top Jobs list of occupations paying sustainable wages and with a promising future based on the projected number of openings and growth. 9 The "Top Jobs" for the Central region and their median salaries are shown in Table 4 by expected growth rate. They are displayed by typical education required. At the top of each column, the median earnings in Ohio for the education credential level (known as threshold 1 in the Equitable Value Explorer Tool) is listed. The top jobs for which wage data are available, with the exception of pre-school teacher jobs, meet or exceed the median earnings threshold for the credential level. Please note that wage data were not reported for nursing assistants; medical records & health information technicians; emergency medical technicians & paramedics; web developers; and software developers.

Jobs Ohio identifies several core industries for growth with four areas noted as consistent across regions: Advanced Manufacturing, Technology, Business and Professional Services, and BioHealth. 10 The Top Jobs are color coded if they match one of the four core industries. 11 All jobs in the statewide core industries meet or exceed the threshold for median earnings for the credential level. For Central Ohio, One Columbus has also identified fashion and retail as a core industry which is not included in the top four statewide industries analysis.

⁹ Ohio's Top Jobs List | Ohio's Top Jobs

¹⁰ Core Industries in Cincinnati | REDI Cincinnati

¹¹ Technology.pdf (ohiolmi.com), AdvancedMfg.pdf (ohiolmi.com)

Overall, the Ohio Department of Job and Family Services' Bureau of Labor Market Information projects jobs to grow fastest in the Central region compared to other regions, increasing by 5.2% in Central Ohio from $2018 - 2028^{12}$

Table 5. Top Jobs in Central Ohio and Median Salary by Typical Education Required ranked by Projected Annual Growth within the Region

		Central Region Top	Jobs		
Postsecondary Non-Degree Award Threshold 1 = \$31,070	Salary	Associate Degree Threshold 1 = \$34,911	Salary	Bachelor's Degree Threshold 1 = \$46,380	Salary
Heavy and Tractor-Trailer Truck Drivers	\$46K	Preschool Teachers, Except Special Education	\$30K	Registered Nurses	\$66K
Licensed Practical and Licensed Vocational Nurses	\$46K	Dental Hygienists	\$73K	Software Developers, Applications	(Not Availa ble)
Medical Assistants (Direct Support Professional)	\$35K	Respiratory Therapists	\$59K	Market Research Analysts and Marketing Specialists	\$66K
Nursing Assistants	(Not Availa ble)	Veterinary Technologists and Technicians	\$35K	Management Analysts	\$83K
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$49K	Radiologic Technologists and Technicians	\$59K	Financial Managers	\$126K
Dental Assistants	\$42K	Physical Therapist Assistants	\$59K	General and Operations Manager	\$102K
Firefighters	\$62K	Paralegals and Legal Assistants	\$47K	Business Operations Specialists, All Other	\$71K
Massage Therapists	\$58K	Occupational Therapy Assistants	\$59K	Medical and Health Services Managers	\$97K
Medical Records and Health Information Technicians	(Not Availa ble)	Computer Network Support Specialists	\$64K	Elementary School Teachers, Except Special Education	\$64K

¹² Employment Projections (ohiolmi.com)

Central Region Top Jobs									
Postsecondary Non-Degree Award Threshold 1 = \$31,070	Salary	Associate Degree Threshold 1 = \$34,911	Salary	Bachelor's Degree Threshold 1 = \$46,380	Salary				
Phlebotomists	\$32K	Diagnostic Medical Sonographers	\$67K	Human Resource Specialists	\$57K				
Health Technologists and Technicians, All Other	\$40K	Mechanical Engineering Technicians	\$55K	Computer Systems Analysts	\$90K				
Surgical Technologists	\$49K	Environmental Science and Protection Technicians, Including Health	\$39K	Secondary School Teachers, Except Special and Career/Technical Education	\$71K				
Psychiatric Technicians	\$33K	Medical Equipment Repairers	\$51K	Industrial Engineers	\$82K				
Emergency Medical Technicians and Paramedics	Not Availa ble	Chemical Technicians	\$52K	Information Security Analysts	\$90K				
Computer Numerically Controlled Machine Tool Programmers, Metal	\$53K	Electrical and Electronics Engineering Technicians	\$71K	Accountants and Auditors	\$71K				

■BioHealth ■ Advanced Manufacturing ■ Technology ■ Business & Professional Services ■ Multiple Core Industries ■Not in a core industry

Table 6 shows the number of completers by institution for the four industries. The field of study was correlated to industry by CIP code as shown in the Appendix. This gives a general sense of the production of education awards in these fields. Baccalaureate level completions far surpass awards at associate and certificate levels.

Table 6 Number of Completions by Industry Category for Central Ohio, 2021

Public Institutions	E	BioHealth	า	Advanced Manufacturing		Technology			Business and Professional Services			
mstitutions	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac
Adult and Community Education- Hudson	79	0	0	0	0	0	0	0	0	0	0	0

Public Institutions	E	BioHealth Advanced Manufacturing			Т	echnolog	ВУ	Business and Professional Services				
institutions	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac	Cert	Assoc	Bac
Career and Technology Education Centers of Licking County	183	0	0	26	0	0	14	0	0	0	0	0
Columbus State Community College	907	307	0	622	202	0	80	159	0	482	277	0
Eastland- Fairfield Career and Technical Schools	9	0	0	43	0	0	0	0	0	0	0	0
Knox County Career Center	115	0	0	6	0	0	2	0	0	1	0	0
Tri-Rivers Career Center	93	0	0	14	0	0	0	0	0	0	0	0
Central Ohio Technical College	189	243	0	6	16	0	4	38	0	40	40	0
Marion Technical College	17	129	0	11	18	0	14	8	0	48	33	0
Ohio State University- Marion Campus	0	0	18	0	0	0	0	0	0	0	0	4
Ohio State University- Newark Campus	0	0	32	0	0	0	0	0	0	0	0	11
Ohio University- Lancaster Campus	0	1	0	0	12	0	0	1	0	0	13	0
Ohio State University-Main Campus	25	0	2764	0	0	1760	0	0	113	84	0	2073
TOTAL	1617	680	2814	728	248	1760	114	206	113	655	363	2088

 ${\tt Data \, Source: \, National \, Center \, for \, Education \, Statistics \, Integrated \, Postsecondary \, Education \, Data \, System}$

Figure 4 shows the proportion of degrees conferred by race for the core industries in 2021, which were defined by matching CIP codes (See Appendix). Black or African American students are a lesser proportion of baccalaureate awards in the core industries compared to their representation in the population. Hispanic or Latinx students were most significantly underrepresented in education awards in Technology.

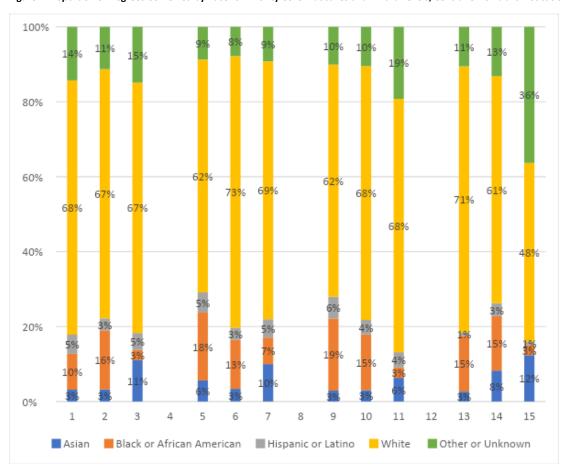


Figure 4 Proportion of Degrees Conferred by Race for Priority Core Industries and Award Levels, Central Ohio Public Institutions 2021

Data Source: National Center for Education Statistics Integrated Postsecondary Education Data System; Note: Certificates only includes certificates below the baccalaureate level

Appendix

Scale Strategic Solutions connected industry priorities and designations from JobsOhio with fields of study based on CIP code families that best fit the industry. Please note that some occupations may have a variety of fields of study from which they may hire.

Table 7: Crosswalk of regional core industries, job categories, and CIP codes of field of study

Core Industries	Job Categories from Ohio's Top Jobs	<u>CIP Codes</u>
BioHealth	Healthcare Practitioners and Technical; Healthcare Support; select Life and Physical Science, and Social Sciences; select Management	26- Biological and BiomedicalSciences42- Psychology51- Health Professions
Advanced Manufacturing	Installation, Maintenance, and Repair; Production; select Management	14- Engineering15- Engineering Tech47- Mechanic, Repair, and installations48- Precision Production
Technology	Computer and Mathematical; select Management	11- Computer and Information Sciences
Business and Professional Services	Business and Financial Operations; select Management	52- Business, Management, and Marketing