



UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

TAB C

November 19, 2021

Kem C. Gardner Policy Institute Report: The Costs and Benefits of Higher Education

A new report from the Kem C. Gardner Policy Institute analyzes the costs and benefits of higher education within the Utah System of Higher Education. Upon review of the compiled data, it remains clear that postsecondary education plays a major role in providing a skilled workforce for Utah's growing economy. Additionally, USHE institutions contribute to the creation of companies and inventions through research and innovation, and educational attainment is associated with a wide variety of individual and societal benefits.

Key findings include:

- The state contributes significantly to higher education — Sixteen percent (\$1.3 billion) of state funds were dedicated to higher education in the FY 2020 Utah budget.
- While tuition and fees have risen substantially in recent decades, so has grant aid — Average tuition and fees more than doubled from 2000 (\$2,283) to 2020 (\$5,306). However, grant aid also increased, with 42% of USHE students receiving aid in 2019 compared with 34% in 2009.
- USHE serves a primary role in educating Utah's postsecondary students — Approximately 80% of Utah high school graduates who pursue postsecondary education attend a USHE institution.
- Education provides many individual and societal benefits — Educational attainment is associated with a wide variety of individual and societal benefits, including increased wages, economic mobility, and GDP and decreased unemployment rates, poverty rates, and reliance on public assistance.

Commissioner's Recommendation

This is a discussion item only; no action is required.

Attachment

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Research Associate

USHE Data Book

The Costs and Benefits of Higher Education

As a large share of Utah's state budget and a key input to economic development, higher education plays a significant role in the Utah economy and is associated with many individual and societal benefits.

November 2021

USHE Data Book

The Costs and Benefits of Higher Education

Analysis in Brief

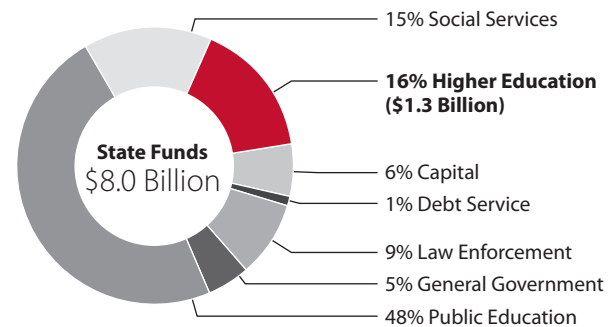
Postsecondary education plays a major role in providing a skilled workforce for Utah's growing economy. Additionally, institutions of higher learning contribute to the creation of companies and inventions through research and innovation, and educational attainment is associated with a wide variety of individual and societal benefits. This data book compiles data related to the costs and benefits of higher education in Utah through the primary lens of Utah System of Higher Education (USHE) institutions.

Key Findings

- **The state contributes significantly to higher education**—Sixteen percent (\$1.3 billion) of state funds were dedicated to higher education in the FY 2020 Utah budget. While these investments are substantial, a previous USHE analysis estimated that every \$1 the state invests in public higher education returns \$3 in tax revenues due to increased wages of USHE graduates.¹
- **While tuition and fees have risen substantially in recent decades, so has grant aid**—Average tuition and fees more than doubled from 2000 (\$2,283) to 2020 (\$5,306). However, grant aid also increased, with 42% of USHE students receiving aid in 2019 compared with 34% in 2009. The average amount of aid has also increased in real terms from \$3,908 in 2009 to \$4,770 in 2019. However, students not receiving aid still face much higher tuition costs.
- **USHE serves a primary role in educating Utah's postsecondary students**—Approximately 80% of Utah high school graduates who pursue postsecondary education attend a USHE institution.² In FY 2020, USHE enrolled more than 200,000 students and awarded more than 50,000 degrees and certificates.

- **Education provides many individual and societal benefits**—Educational attainment is associated with a wide variety of individual and societal benefits, including increased wages, economic mobility, and GDP as well as decreased unemployment rates, poverty rates, and reliance on public assistance. Those with higher educational attainment also live healthier lifestyles and are more likely to volunteer, vote, and engage in educational activities with their children.

Utah Budget State Funds, FY 2020



Source: Utah State Legislature

Benefits of Education

Individual Benefits	Societal Benefits
<ul style="list-style-type: none"> ■ Increased earnings ■ Increased economic mobility ■ Healthier lifestyle ■ More likely to receive employer-provided health insurance ■ More likely to do educational activities with their children 	<ul style="list-style-type: none"> ■ Increased GDP ■ Decreased crime ■ Increased volunteerism ■ Increased voter participation ■ Increased tax contributions ■ Lower unemployment rate ■ Reduced reliance on public assistance ■ Reduced healthcare costs ■ Decreased poverty rate

Source: Kem C. Gardner Policy Institute based on literature review

1. Curtin, J. & Palica, M., (2018 January). Return on Investment of USHE Graduates: Individual and State benefits of Postsecondary Education. USHE. <https://ushe.edu/wp-content/uploads/2018/01/2018-1-ROI-of-College-Joe-Curtin-Mike-Palica.pdf>

2. Ma, D. & Hartley, J. (2017 July). Utah's Postsecondary Participation and Completion Patterns. USHE. <https://ushe.edu/wp-content/uploads/2017/07/2017-2-Five-Year-Participation-and-Completion-David-Ma.pdf>

Table of Contents

Introduction	4
Part 1: Costs of Higher Education	5
Utah Budget	5
State Tax Funds vs. Tuition and Fees	5
Expenditures per Student	6
Revenues and Expenditures by Category	8
Tuition and Fees	8
Net Price and Financial Aid	9
Part 2: Benefits of Higher Education	10
Employment	10
Enrollment	11
Degrees and Certificates	11
Individual and Societal Benefits of Educational Attainment	12
<i>Reduced Unemployment and Poverty Rates</i>	13
<i>Increased Wages, GDP, and Tax Revenues</i>	14
<i>Increased Economic Mobility and Reduced Reliance on Public Assistance</i>	14
<i>Better Health Outcomes</i>	15
<i>Volunteerism and Civic Engagement</i>	16
<i>Improved Outcomes for Children</i>	16

Figures

Figure 1: Theoretical Construct for Economic Growth	4
Figure 2: Utah Budget, FY 2020	5
Figure 3: USHE Degree-Granting Institutions' Expenditures by Major Revenue Source, FY 2000–2020	5
Figure 4: Average Undergraduate Resident Tuition and Fees for USHE Degree-Granting Institutions and U.S. Public Universities, FY 2000, FY 2010, and FY 2020	5
Figure 5: USHE Degree-Granting Institutions' Revenues by Major Source, FY 2020	6
Figure 6: USHE Technical Colleges' Revenues by Major Source, FY 2020	6
Figure 7: USHE Expenditures per FTE Student by Major Revenue Source for Degree-Granting Institutions, FY 2020	6
Figure 8: Expenditure per Membership Hour for Technical Colleges, FY 2020	6
Figure 9: USHE Degree-Granting Institutions Revenue by Category, FY 2020	7
Figure 10: USHE Technical Colleges' Revenue by Category, FY 2020	7
Figure 11: USHE Degree-Granting Institutions' Expenditures by Category, FY 2020	7
Figure 12: USHE Technical Colleges' Expenditures by Category, FY 2020	7
Figure 13: Share of Undergraduate Students Receiving Federal, State, Local, Institutional or Other Sources of Grant Aid, 2009 and 2019	9
Figure 14: Average Amount of Federal, State, Local, Institutional, or Other Grant Aid Received, 2009 and 2019	9
Figure 15: Net Price for Students Awarded Grant or Scholarship Aid at Degree-Granting Institutions, 2009 and 2019	9

Table of Contents *(continued)*

Figure 16: USHE Operating Expenditures, FY 2020.....	10
Figure 17: Enrollment at USHE Degree-Granting Institutions by County, FY 2020.....	11
Figure 18: Utah Educational Attainment of the Population 25 and Older, 2019	13
Figure 19: Utah Unemployment Rate by Educational Attainment, 2019	13
Figure 20: Utah Poverty Rate by Educational Attainment, 2019	13
Figure 21: Utah Median Annual Income by Educational Attainment, 2019	14
Figure 22: U.S. Economic Mobility.....	14
Figure 23: Share of U.S. Adults 25+ Living in Households Participating in Various Public Assistance Programs by Educational Attainment, 2018.....	15
Figure 24: Share of Utah Adults Who Reported Fair or Poor General Health by Educational Attainment, 2019.....	15
Figure 25: Utah Adult Obesity Rates by Educational Attainment, 2019	15
Figure 26: Utah Uninsured Rates by Educational Attainment, 2019	15
Figure 27: Share of Utah Adults Reporting No Physical Activity, 2019	15
Figure 28: Smoking Rates by Educational Attainment, 2019.	16
Figure 29: U.S. Volunteer Rate, 2015.....	16
Figure 30: U.S. Voter Participation Rate by Educational Attainment, November 2020 Election.....	16
Figure 31: Share of U.S. Children Age 3 to 5 Enrolled in School by Parent's Educational Attainment, 2019	16

Tables

Table 1: USHE Institutions	4
Table 2: Utah Degree-Granting Institution Undergraduate Tuition and Fees Comparison, 2020.....	8
Table 3: Average Undergraduate Tuition and Fees in Western States, 2019.....	8
Table 4: Utah Technical College Tuition Per Membership Hour, FY 2020.....	8
Table 5: USHE Employment by Institution, FY 2020	10
Table 6: Enrollment at Degree-Granting institutions, FY 2020.....	10
Table 7: Enrollment at USHE Technical Colleges, FY 2020.	10
Table 8: Share of State Population age 18-35 Enrolled in a USHE Institution by Race/Ethnicity and Sex, 2018	11
Table 9: Certificates Awarded by USHE Technical Colleges, FY 2020	11
Table 10: Degrees and Certificates Awarded by USHE Degree-Granting Institutions, FY 2020	12
Table 11: Degrees and Certificates Awarded by Field of Study for USHE Degree-Granting Institutions, FY 2019 ...	12
Table 12: Most Awarded Technical College Certificates, FY 2020.....	13
Table 13: Benefits of Education	13

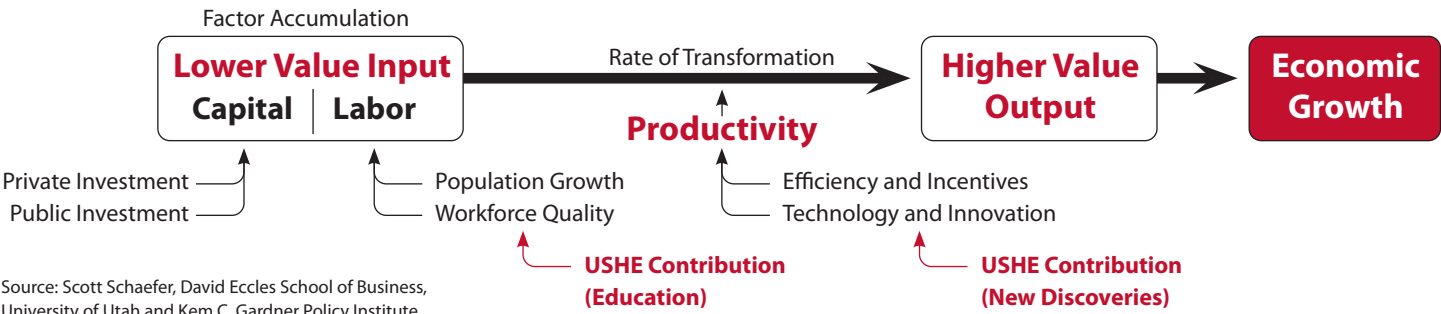
Introduction

As a large share of Utah’s state budget and a key input to economic development, education plays a significant role in the Utah economy. In a 2015 survey of more than 150 major local employers, 71% reported difficulty finding enough skilled or qualified employees.¹ In 2019, a third of surveyed CEOs cited a labor shortage as the most concerning economic risk.² Postsecondary education plays a major role in providing a skilled workforce for Utah’s growing economy. Additionally, institutions of higher learning contribute to the creation of companies and inventions through research and innovation, and educational attainment is associated with a wide variety of individual and societal benefits. Figure 1 visualizes what makes an economy grow and the contribution that the Utah System of Higher Education (USHE) can provide.

USHE serves a primary role in postsecondary education in the state of Utah. About 80% of Utah high school graduates who pursue postsecondary education attend a USHE institution.³ Approximately 10% attend an in-state private institution and another 10% attend out-of-state institutions, these institutions are not directly addressed in this analysis. This data book compiles data related to the costs and benefits of higher education in Utah through the primary lens of USHE institutions. USHE comprises all 16 Utah public universities and colleges, including two research universities, four regional universities, two community colleges, and eight technical colleges (see Table 1).

Figure 1: Theoretical Construct for Economic Growth

What makes an economy grow?



Source: Scott Schaefer, David Eccles School of Business, University of Utah and Kem C. Gardner Policy Institute

Table 1: USHE Institutions

Degree-Granting Institutions			Technical Colleges
Research Universities	Regional Universities	Community Colleges	
<ul style="list-style-type: none">- University of Utah (UofU)- Utah State University (USU)	<ul style="list-style-type: none">- Dixie State University- Southern Utah University (SUU)- Utah Valley University (UVU)- Weber State University (WSU)	<ul style="list-style-type: none">- Salt Lake Community College (SLCC)- Snow College	<ul style="list-style-type: none">- Bridgerland Technical College- Davis Technical College- Dixie Technical College- Mountainland Technical College- Ogden-Weber Technical College- Southwest Technical College- Tooele Technical College- Uintah Basin Technical College

Source: Utah System of Higher Education

Part 1: Costs of Higher Education

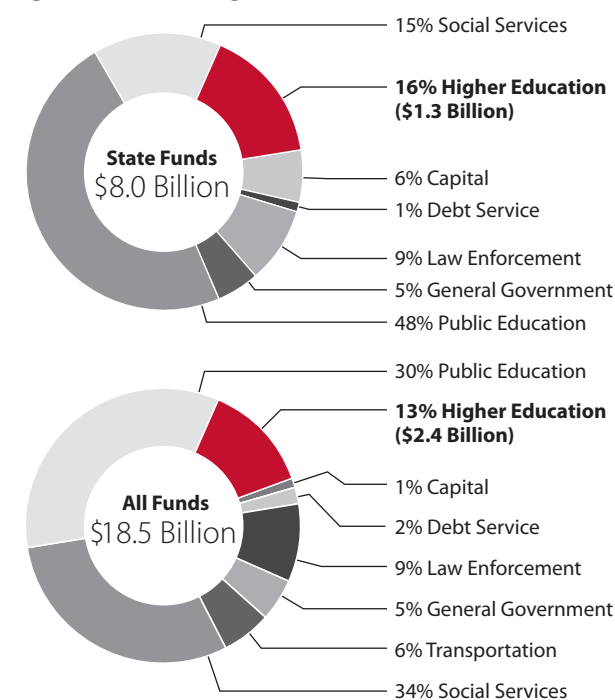
Utah Budget

Composed of Utah's public institutions, USHE receives significant state funding. Thirteen percent (\$2.4 billion) of all funds and 16% (\$1.3 billion) of state funds were dedicated to higher education in the FY 2020 Utah budget (see Figure 2).⁴ While these investments are substantial, a previous USHE analysis estimated that every \$1 the state invests in public higher education returns \$3 in tax revenues due to increased wages of USHE graduates.⁵

State Tax Funds vs. Tuition and Fees

Over time, the proportion of expenditures financed from state tax fund revenue versus from tuition and fees has fallen for degree-granting institutions as shown in Figure 3. In 2000,

Figure 2: Utah Budget, FY 2020

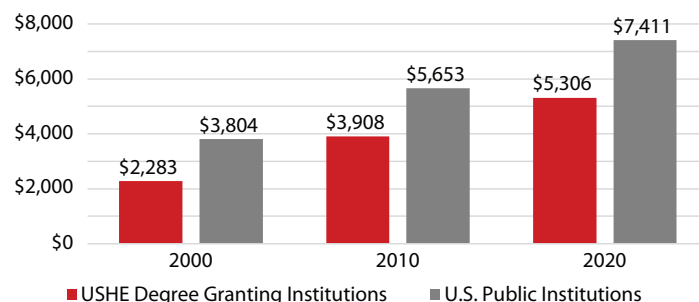


Source: Utah State Legislature

72% of funding came from state appropriations compared with 50% in 2020. This decline in state investment likely contributes to the rise in tuition and fees seen in recent decades, mirroring the rise nationwide (see Figure 4).⁶ While tuition and fees at Utah's public institutions and U.S. public institutions have both grown significantly over the past two decades, Utah's tuition and fees remain below national averages.

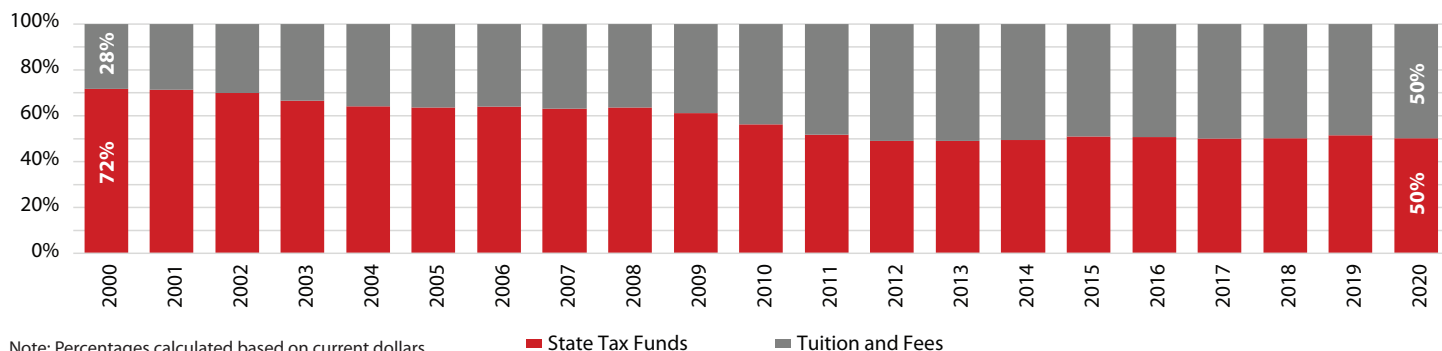
While state tax funds and tuition and fees finance approximately equal portions of expenditures for degree-granting institutions overall, this proportion varies widely across USHE institutions. Figures 5 and 6 show the breakdown for degree-granting institutions and technical colleges respectively. The state's community colleges, Salt Lake Community College and Snow College, receive larger proportions of their funding from state tax funds (63% and 70%, respectively) compared with other degree-granting institutions. Regional universities and research universities have proportions ranging from 43% to 54%.

Figure 4: Average Undergraduate Resident Tuition and Fees for USHE Degree-Granting Institutions and U.S. Public Universities, FY 2000, FY 2010, and FY 2020 (Inflation-Adjusted 2020 Dollars)



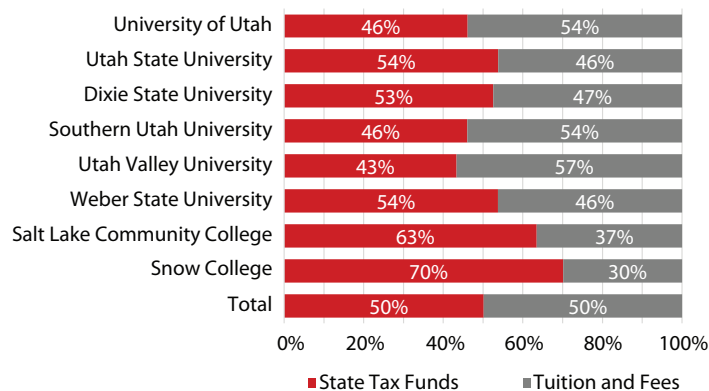
Note: Data are for the entire academic year and are average charges for full-time students. Source: Utah System of Higher Education and National Center for Education Statistics Table 330.10

Figure 3: USHE Degree-Granting Institutions' Expenditures by Major Revenue Source, FY 2000–FY 2020



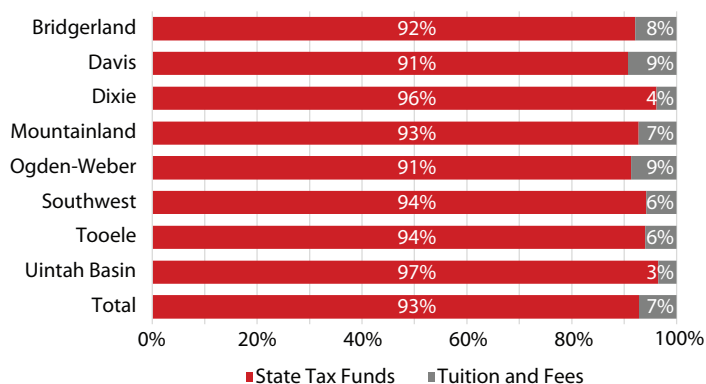
Note: Percentages calculated based on current dollars. Source: Utah System of Higher Education

Figure 5: USHE Degree-Granting Institutions' Revenues by Major Source, FY 2020



Source: Utah System of Higher Education

Figure 6: USHE Technical Colleges' Revenues by Major Source, FY 2020

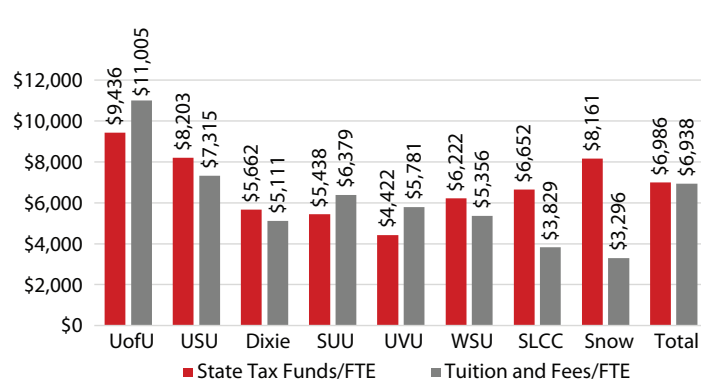


Source: Utah System of Higher Education

Technical colleges receive a much larger share of their funding through state tax funds. In FY 2020, the proportion was more than 90% for all technical colleges, reaching as high as 97% for Uintah Basin Technical College. These differences are due in part to differences in mission. Utah's technical colleges focus on providing short-term training that is intensely focused on job placement. Examples of programs include training to become a welder, electrician, truck driver, cosmetologist, nursing assistant or phlebotomist. Technical college programs are overseen by regional industry leaders to ensure graduates gain skills currently needed by local employers.⁷

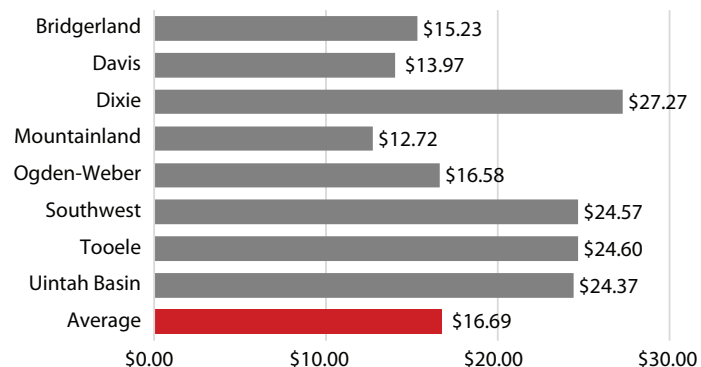
Utah's degree-granting institutions hold different missions, offer different degrees and certificates, and serve different populations. Funding for higher education is based on a variety of factors, one of which is tied to an institution's mission. One of the ways Utah makes this distinction is through performance-based funding. Performance-based funding allots a portion of state funding based on an institutions' outcomes. While some of the measured outcomes are the same across institutions, others differ. For example, outcomes related to research are included for the University of Utah and Utah State University, but not for other

Figure 7: USHE Expenditures per FTE Student by Major Revenue Source for Degree-Granting Institutions, FY 2020



Source: Utah System of Higher Education

Figure 8: Expenditure per Membership Hour for Technical Colleges, FY 2020



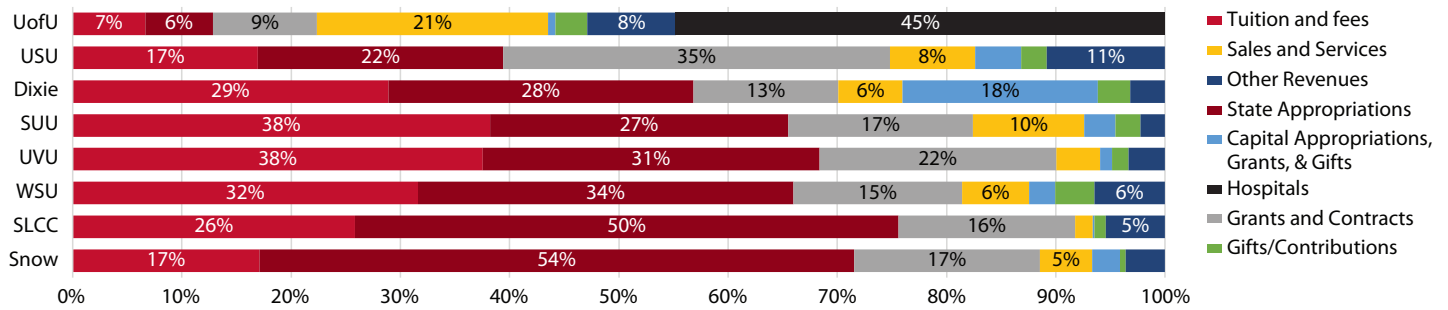
Source: Utah System of Higher Education

degree-granting institutions since research is not a part of their missions.⁸ Technical colleges include metrics related to short-term occupational training and secondary completion.⁹

Expenditures per Student

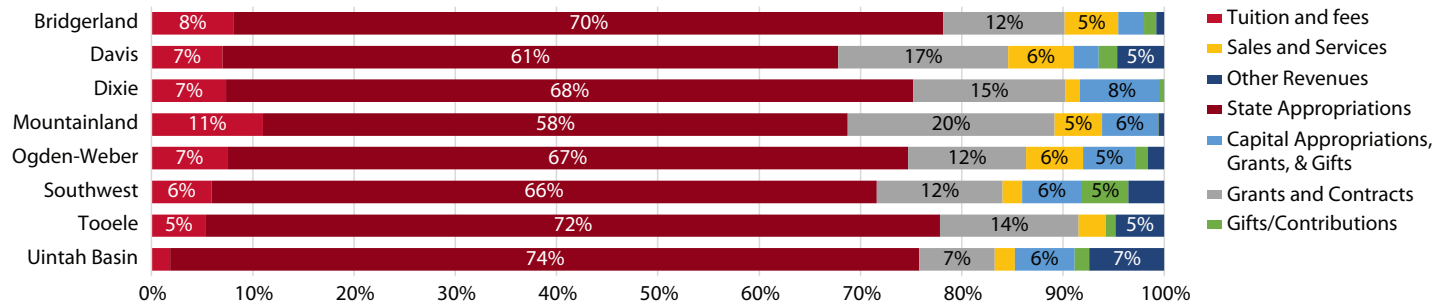
Additionally, while some institutions receive a smaller *proportion* of their funding from state tax funds when compared with tuition and fees, this does not necessarily mean they receive less funding overall or even less per full-time equivalent (FTE) student. Technical colleges have fewer students and employees than degree-granting institutions and their overall budgets are smaller. Even among degree-granting institutions, employment, programs, and other resources vary significantly, necessitating varying funding levels. Figure 7 shows expenditures per FTE by institution for degree-granting institutions. Figure 8 shows expenditures per membership hour for technical colleges. Differences in expenditures per membership hour may be affected by the types of programs offered at each institution. Comparisons should not be made between technical colleges and degree-granting institutions.

Figure 9: USHE Degree-Granting Institutions' Revenue by Category, FY 2020



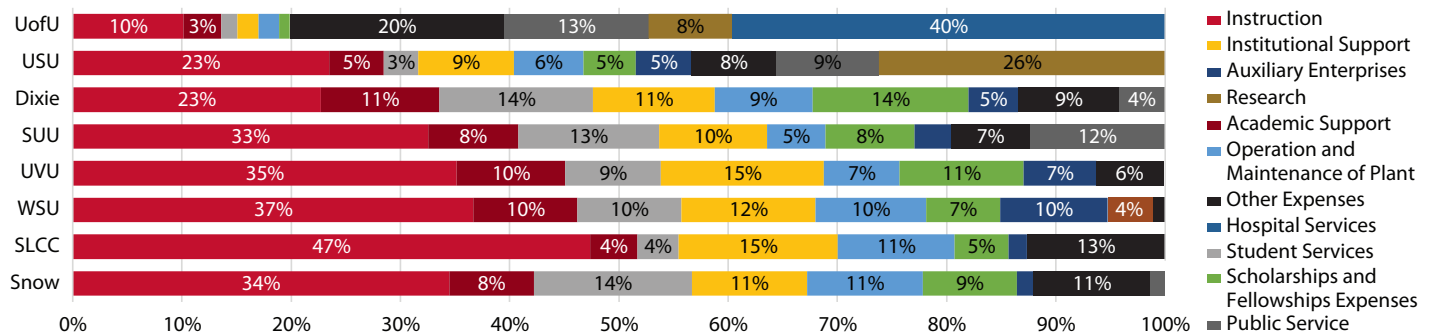
Note: Grants and Contracts include operating grants and contracts, federal grants, and state grants. Sales and Services include auxiliary enterprises and educational activities. Other Revenues include independent operations, other operations, local appropriations/education district taxes, investment income, other nonoperating revenues, and additions to permanent endowments. Source: Utah System of Higher Education

Figure 10: USHE Technical Colleges' Revenue by Category, FY 2020



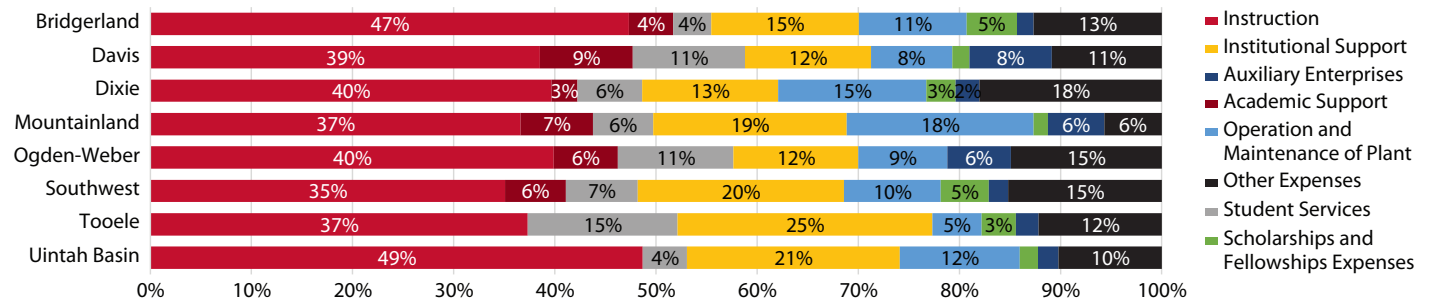
Note: Grants and Contracts include operating grants and contracts, federal grants, and state grants. Sales and Services include auxiliary enterprises and educational activities. Other Revenues include independent operations, other operations, local appropriations/education district taxes, investment income, other nonoperating revenues, and other revenues and additions. Source: Utah System of Higher Education

Figure 11: USHE Degree-Granting Institutions' Expenditures by Category, FY 2020



Note: Other expenses include independent operations, depreciation, interest and other nonoperating expenses and deductions. Source: Utah System of Higher Education

Figure 12: USHE Technical Colleges' Expenditures by Category, FY 2020



Note: Other expenses include independent operations, depreciation, interest, other expenses and deductions, transfers, public service, and other nonoperating expenses and deductions. Source: Utah System of Higher Education

Revenues and Expenditures by Category

While state tax funds and tuition and fees are important revenue sources in higher education, they are not the only sources. Institutions of higher learning serve many functions. In addition to educating students, some postsecondary institutions also provide research and innovation, community events, athletics and performing arts, and in some cases, health care. This service variety leads to diverse sources of revenue. For example, in FY 2020, USHE’s research institutions (University of Utah and Utah State University) received a combined \$893 million in research funding.^{10, 11} Figures 9 and 10 show revenue sources by category for USHE degree-granting institutions and technical colleges for FY 2020. Similarly, expenditures also differ across institutions. Expenditures by category for each institution are shown in Figures 11 and 12.

Tuition and Fees

Table 2 compares tuition and mandatory fees for Utah’s degree-granting institutions. Each institution is unique, so rather than comparing them to each other, each is compared with similar institutions in other states. All Utah public degree-granting institutions have tuition and mandatory fee costs below their comparison group average. Table 3 shows average tuition at two-year and four-year institutions for western states. Utah ranks third highest for tuition and fees among two-year institutions and ninth among four-year institutions.

As shown in Table 2, nonresidents pay much higher tuition than residents. One reason for this is that nonresident students come from families who did not pay taxes to the state. In-state students are also more likely to remain in state after graduation, working and contributing to Utah’s economy. Based on an analysis from the Utah Data Research Center, 77.3% of in-state students were working in Utah one year after graduation compared with 56.8% of out-of-state students. Two-thirds of in-state students were still working in the state five years after graduation compared with only 44.4% of out-of-state students.^{12, 13} Other analyses have produced similar results.^{14, 15}

Table 3: Average Undergraduate Tuition and Fees in Western States, 2019

State	2-year		4-year	
	Amount	Rank	Amount	Rank
Arizona	\$2,161	8	\$10,666	1
California	\$1,271	10	\$8,118	4
Colorado	\$3,655	5	\$9,394	3
Idaho	\$3,345	6	\$7,586	5
Montana	\$3,756	4	\$6,972	7
Nevada	Data Unavailable	NA	\$5,845	10
New Mexico	\$1,705	9	\$6,902	8
Oregon	\$4,709	1	\$10,286	2
Utah	\$3,843	3	\$6,731	9
Washington	\$4,169	2	\$7,036	6
Wyoming	\$3,219	7	\$4,596	11
United States	\$3,313	—	\$9,212	—

Source: National Center for Education Statistics, Table 330.20

Table 4: Utah Technical College Tuition per Membership Hour, FY 2020

Institution	Tuition per Membership Hour	Cost of Tuition for 900-Hour Program
Bridgerland	\$2.00	\$1,800
Davis	\$2.10	\$1,890
Dixie	\$2.25	\$2,025
Mountainland	\$2.00	\$1,890
Ogden-Weber	\$2.10	\$1,800
Southwest	\$2.00	\$1,800
Tooele	\$2.00	\$1,800
Uintah	\$2.00	\$1,800

Source: Utah System of Higher Education

Table 4 shows tuition rates per membership hour for Utah’s technical colleges. Program lengths can vary significantly, with some programs requiring fewer than 600 membership hours and other programs over 900 membership hours. As the table shows, the cost per membership hour is fairly consistent across colleges, with tuition for a 900-hour program costing

Table 2: Utah Degree-Granting Institution Undergraduate Tuition and Fees Comparison, 2020

Institution	Utah Institutions’ Resident Tuition/Fees	Peer Institutions’ Average Resident Tuition/Fees	Utah Institution Resident Tuition/ Fees Ranking Compared with Peer Institutions	Utah Institution Nonresident Tuition/ Fees
University of Utah	\$8,615	\$12,609	10 of 11	\$27,220
Utah State University	\$7,659	\$8,994	8 of 11	\$22,197
Southern Utah University	\$6,770	\$8,845	9 of 11	\$20,586
Weber State University	\$5,986	\$8,669	9 of 11	\$15,969
Utah Valley University	\$5,820	\$8,161	11 of 11	\$16,570
Dixie State University	\$5,496	\$8,283	11 of 11	\$15,792
Salt Lake Community College	\$3,929	\$3,969	5 of 11	\$12,460
Snow College	\$3,836	\$4,140	7 of 10	\$12,876

Source: Utah System of Higher Education

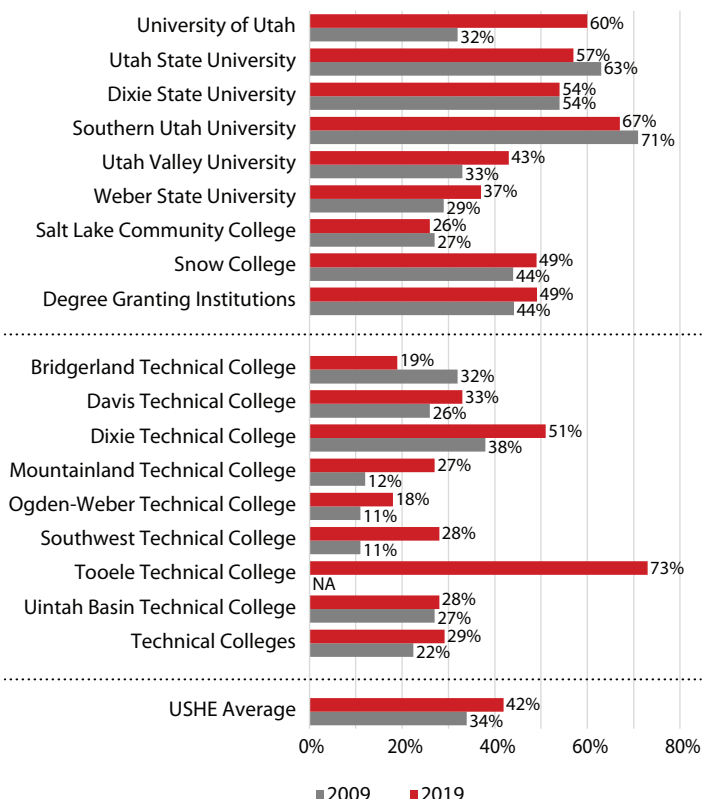
approximately \$1,800 to complete. Books, materials, and other fees may vary by program, but technical colleges minimize fees as much as possible in providing low-cost technical education to Utahns.

Net Price and Financial Aid

While tuition and fees have risen significantly in the past two decades (as shown previously in Figure 4), financial aid may offset some of this cost. Overall, the share of students receiving federal, state, local, institutional or other sources of grant aid increased over the last decade for both degree-granting institutions and technical colleges (see Figure 13). Additionally, the average amount of aid received increased overall and for nearly every institution, as shown in Figure 14.

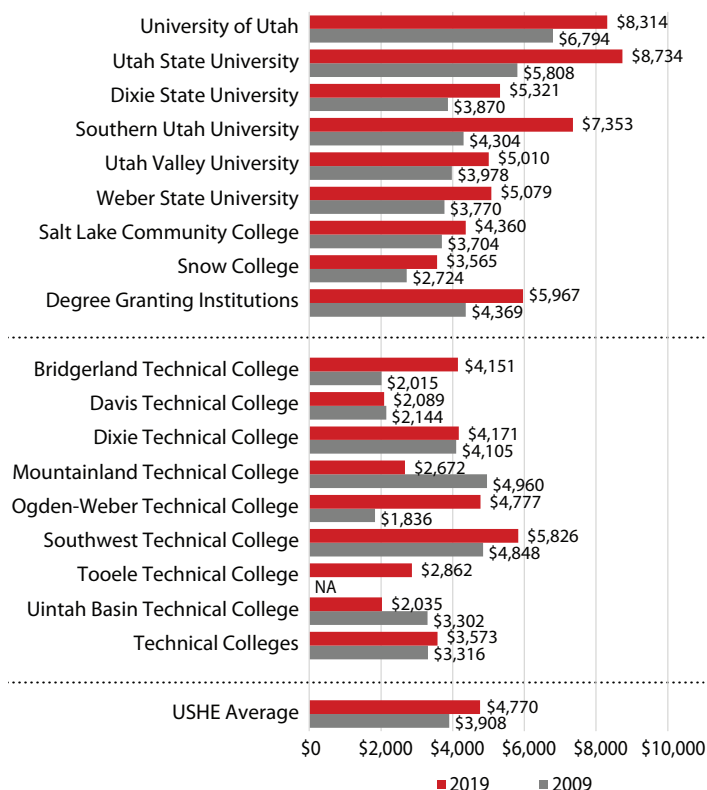
For those students receiving aid, the net price for the average total cost of attendance fell from 2009 to 2019, even after adjusting for inflation. Individual institutions vary significantly, with a decrease in net cost for Dixie State University, Utah Valley University, Weber State University, Salt Lake Community College, and Snow College. University of Utah, Utah State University, and Southern Utah University saw increases in net price for the same time period. Data for degree-granting institutions are shown in Figure 15.

Figure 13: Share of Undergraduate Students Receiving Federal, State, Local, Institutional or Other Sources of Grant Aid, 2009 and 2019



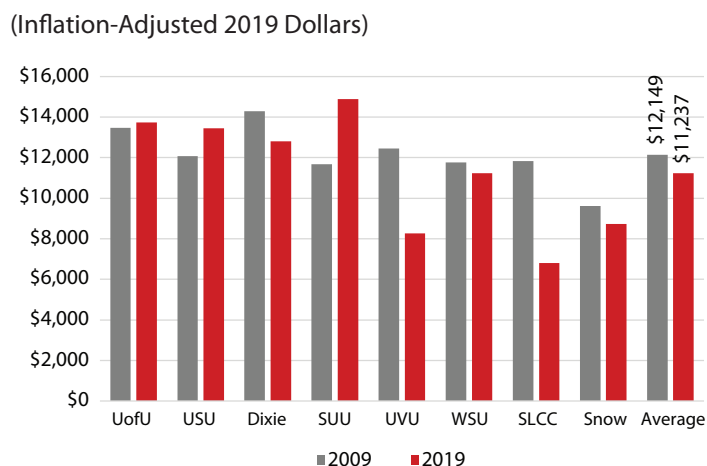
Source: U.S. Department of Education, Integrated Postsecondary Education Data System

Figure 14: Average Amount of Federal, State, Local, Institutional, or Other Grant Aid Received, 2009 and 2019 (Inflation-Adjusted 2019 Dollars)



Source: U.S. Department of Education, Integrated Postsecondary Education Data System and Bureau of Labor Statistics

Figure 15: Net Price for Students Awarded Grant or Scholarship Aid at Degree-Granting Institutions, 2009 and 2019 (Inflation-Adjusted 2019 Dollars)



Note: Includes full-time, first-time degree/certificate-seeking undergraduate students paying the in-state or in-district tuition rate.

Source: U.S. Department of Education, Integrated Postsecondary Education Data System and Bureau of Labor Statistics

Part 2: Benefits of Higher Education

Employment

While the costs of postsecondary education can be significant for both individuals and the state, the benefits are substantial. First, USHE provides employment for many Utah residents. Most (60%) of USHE's operating expenditures pay for employee wages, with another 18% spent on employee benefits (see Figure 15). Employees pay income taxes and spend some of those wages, providing revenue to state and local government coffers and continuing to circulate money in the local economy.

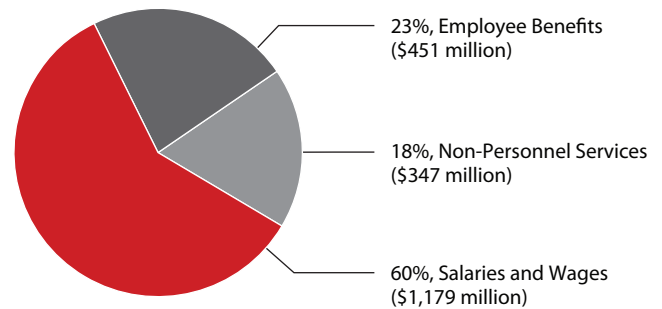
Table 5: USHE Employment by Institution, FY 2020

Institution	Employee FTE Count	Estimated Headcount
University of Utah	22,939	28,880
Utah State University	5,996	7,549
Weber State University	2,618	3,297
Southern Utah University	1,627	2,048
Snow College	582	732
Dixie State University	1,362	1,714
Utah Valley University	3,441	4,332
Salt Lake Community College	2,123	2,672
Bridgerland Technical College	174	219
Davis Technical College	253	318
Dixie Technical College	105	132
Mountainland Technical College	216	272
Ogden-Weber Technical College	323	407
Southwest Technical College	64	81
Tooele Technical College	52	65
Uintah Basin Technical College	87	110
State Boards of Regents & Statewide Programs	451	568
Degree-Granting Institutions	40,687	51,225
Technical Colleges	1,274	1,604
Total	42,412	53,397

Note: Estimated Headcount is calculated using Bureau of Economic Analysis data.
Source: Utah System of Higher Education and Bureau of Economic Analysis

Conducting a comprehensive economic contribution and impact analysis would shed light on just how much these jobs and wages affect the Utah economy. However, even without this analysis we can begin to understand the impact by seeing the direct employment of USHE institutions. Table 5 shows that USHE institutions employ more than 40,000 FTEs with an estimated headcount of 53,000.

Figure 16: USHE Operating Expenditures, FY 2020



Source: Utah System of Higher Education

Table 6: Enrollment at USHE Degree-Granting institutions, FY 2020

Institution	Fall End of Term Enrollment
University of Utah	33,152
Utah State University	29,093
Weber State University	29,969
Southern Utah University	12,210
Snow College	5,450
Dixie State University	11,177
Utah Valley University	42,030
Salt Lake Community College	30,782
Total	193,863

Source: Utah System of Higher Education

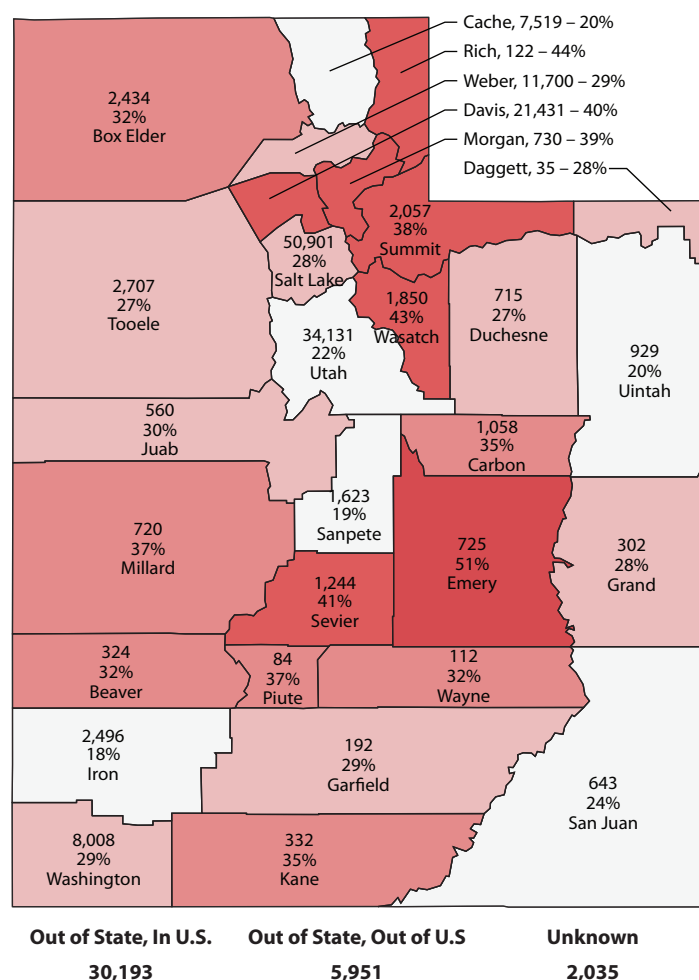
Table 7: Enrollment at USHE Technical Colleges, FY 2020

	Postsecondary Membership Hours	Distinct Postsecondary Headcount	Secondary Membership Hours	Distinct Secondary Headcount
Bridgerland	727,114	3,527	404,646	1,942
Davis	1,090,704	4,733	399,819	1,717
Dixie	305,617	1,998	46,898	169
Mountainland	770,123	3,684	489,675	1,479
Ogden-Weber	826,998	4,014	333,064	1,869
Southwest	185,725	1,214	82,237	890
Tooele	169,592	763	51,536	314
Uintah Basin	203,426	2,275	215,695	1,455
Total	4,279,299	22,208	2,023,570	9,835

Source: Utah System of Higher Education

Figure 17: Enrollment at USHE Degree-Granting Institutions by County, FY 2020

(Total Enrollment and Share of the College-Age [18–29] Population)



Note: Fall end of term headcount.

Source: Utah System of Higher Education and Kem C. Gardner Policy Institute

Enrollment

In addition to providing jobs and paying wages, USHE institutions educate students. More than 200,000 students were enrolled in a USHE institution in FY 2020. Degree-granting institutions enrolled approximately 194,000 students while technical colleges educated more than 30,000 students with over six million membership hours (see Tables 6 and 7). USHE institutions serve students from all counties across the state as shown in Figure 17.

Table 8 shows the share of the state population age 18–35 enrolled at a USHE institution by race/ethnicity and sex. White students in this age category enroll at an average rate of 15.1% compared with an average of 11.6% for students of color. Previous research from USHE and the Gardner Institute shows that students of color and economically disadvantaged students face disparities in educational outcomes, including both enrollment and degree attainment.^{16,17} The recently

Table 8: Share of State Population Age 18–35 Enrolled in a USHE Institution by Race/Ethnicity and Sex, 2018

Race/Ethnicity	Female	Male	Total
White	14.6%	15.6%	15.1%
Hispanic	10.5%	8.7%	9.6%
Asian	13.4%	13.0%	13.2%
Black	14.6%	11.4%	12.0%
Hawaiian/Pacific Islander	8.5%	9.7%	9.1%
Native American	11.0%	8.5%	9.8%
Two or More	14.7%	14.9%	14.8%
Total Average	12.5%	11.7%	12.0%

Source: Utah System of Higher Education

formed Utah Board of Higher Education has committed to collaborating with all USHE institutions to address these opportunity gaps.¹⁸

Degrees and Certificates

As students enroll in institutions of higher education, they likely gain valuable knowledge and skills whether or not they earn a degree or certificate. That said, USHE institutions award many degrees and certificates each year, further preparing students for a variety of career fields. In FY 2020, USHE institutions awarded more than 50,000 certificates and degrees. Tables 9 and 10 detail the level and institution for these awards. Table 11 shows degrees and certificates by field of study for degree-granting institutions. Table 12 shows the most awarded certificates for technical colleges for both postsecondary and secondary students. In addition to their postsecondary and secondary students, Utah's technical colleges offer education to the existing Utah workforce. Through the Custom Fit program, technical colleges partner with Utah employers to provide training and education to meet their specific needs.¹⁹

Table 9: Certificates Awarded by USHE Technical Colleges, FY 2020

Institution	Certificate of Less than 1 Year	Certificate of 1–2 Years	Total Certificates
Bridgerland Technical College	551	374	925
Davis Technical College	961	494	1,455
Dixie Technical College	194	147	341
Mountainland Technical College	1,251	409	1,660
Ogden-Weber Technical College	514	368	882
Southwest Technical College	223	86	309
Tooele Technical College	111	82	193
Uintah Basin Technical College	504	64	568
Total	4,309	2,024	6,333

Source: Utah System of Higher Education

Table 10: Degrees and Certificates Awarded by USHE Degree-Granting Institutions, FY 2020

Institution	Cert. of Less than 1 Year	Cert. of 1–2 years	Associate Degree	Bachelor's Degree	Post-Baccalaureate Certificate	Master's Degree	Post-Master's Certificate	Doctor's Degree Professional Practice	Doctor's Degree Research/Scholarship	Total
University of Utah	NA	NA	NA	5,310	450	2,296	224	496	371	9,147
Utah State University	379	74	1,209	4,411	115	837	NA	7	96	7,128
Weber State University	84	32	2,678	2,603	52	333	NA	NA	NA	5,782
Southern Utah University	24	380	963	1,210	NA	450	NA	NA	NA	3,027
Snow College	297	98	1,010	29	NA	NA	NA	NA	NA	1,434
Dixie State University	303	406	863	936	NA	30	NA	NA	NA	2,538
Utah Valley University	186	3,376	2,352	3,713	5	285	NA	NA	NA	9,917
Salt Lake Community College	791	874	3393	NA	NA	NA	NA	NA	NA	5,058
Total	2,064	5,240	12,468	18,212	622	4,231	224	503	467	44,031

Source: Utah System of Higher Education

Table 11: Degrees and Certificates Awarded by Field of Study for USHE Degree-Granting Institutions, FY 2020

Field of Study	UofU	USU	Dixie	SUU	UVU	WSU	SLCC	Snow
Agricultural & Natural Resources	102	357		26	9			36
Architecture and Related Services	60	17					15	
Area, Ethnic, Cultural, Gender, and Group Studies	72	61						
Biological and Biomedical Sciences	271	178	65	92	152	98	18	9
Business Management, Marketing, and Related Support Services	1539	733	231	301	1193	654	417	88
Communications	365	178	119	102	214	158	128	9
Computer and Information Sciences and Support Services	575	245	54	51	457	320	665	14
Construction Trades		2			61		43	7
Culinary Entertainment and Personal Services		7			36		24	10
Education	250	725	56	250	356	180	73	64
Engineering & Related Technologies	809	503	8	59	270	209	121	53
English Language and Literature/Letters	136	121	33	40	97	66	27	14
Family and Consumer Sciences/Human Sciences	143	204		74	67	87	11	32
Foreign Languages Literatures and Linguistics	105	39	8	29	47	115	6	5
Health Professions and Related Programs	1111	715	524	69	381	1868	542	408
History	80	50	4	18	39	30	13	7
Legal Professions and Studies	147	17		6	12		21	2
Liberal Arts and Sciences, General Studies, and Humanities	279	1086	1140	1369	4597	1348	2165	499
Mathematics and Statistics	149	57	5	7	34	44	3	3
Multi/Interdisciplinary Studies	220	206	59	47	47		2	
Parks, Recreation, Leisure, Fitness, and Kinesiology	297	27	40	97	120	42	11	6
Other	1	144	55	93	745	152	328	33
Philosophy and Religious Studies	30	17		7	26	5		1
Physical Sciences & Science Tech	287	60	2	25	34	94	47	5
Psychology	493	265	46	95	448	85	151	17
Social Sciences & Public Administration	1222	642	7	121	164	147	131	23
Visual and Performing Arts	404	111	82	105	311	80	96	89
Total	9147	6767	2538	3083	9917	5782	5058	1434

Note: The "Other" category includes Transportation and Materials Moving, Precision Production, Military Technologies and Applied Sciences, Mechanic Repair Technologies/Technicians, and Homeland Security Law Enforcement Firefighting and Related Protective Services.

Source: U.S. Department of Education, Integrated Postsecondary Education Data System

Individual and Societal Benefits of Educational Attainment

Educational attainment for Utah residents is shown in Figure 18. Roughly one-third of Utah's residents 25 and older have a bachelor's degree or higher, 14th highest of the 50 states. Measuring the share of the population age 25 to 34 with a bachelor's degree or higher sheds light on the educational

attainment of those who are newer to the workforce. By this metric, Utah's share increases slightly to 35% but its ranking drops to 26th. Educational attainment is associated with many benefits, both for the individual receiving the education and for society as a whole, which are summarized in Table 13.

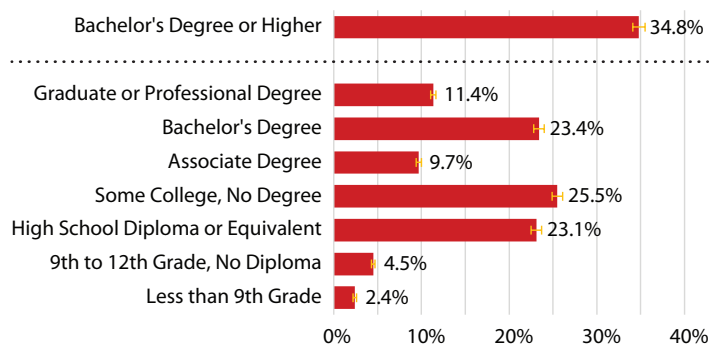
Table 12: Most Awarded Technical College Certificates, FY 2020

Postsecondary Students	
Program	Graduates
Certified Nurse's Assistant	662
Licensed Practical Nurse	283
Welding Technology/Welder	255
Medical/Clinical Assistant	245
Cosmetology/Cosmetologist	225
Emergency Care Attendant (EMT Ambulance)	212
Phlebotomy Technician/Phlebotomist	206
Commercial Driver's License	201
Electrician	161
Aesthetician/Esthetician and Skin Care Specialist	147

Source: Utah System of Higher Education

Secondary Students	
Program	Graduates
Certified Nurse's Assistant	710
Emergency Care Attendant (EMT Ambulance)	88
Automotive Mechanics Technology	81
Carpentry/Carpenter	73
Pharmacy Technician/Assistant	69
Welding Technology/Welder	42
Nail Technician/Manicurist	35
Phlebotomy Technician/Phlebotomist	29
Medical Assistant	22
Home Health Aide/Home Attendant	20

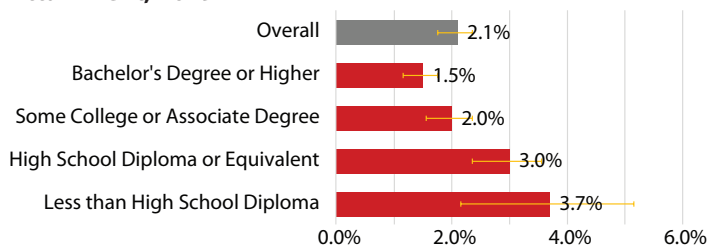
Figure 18: Utah Educational Attainment of the Population 25 and Older, 2019



Note: These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: U.S. Census Bureau American Community Survey 1-Year Estimates

Figure 19: Utah Unemployment Rate by Educational Attainment, 2019



Note: These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

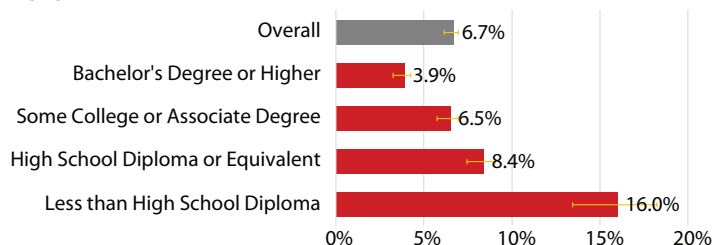
Source: U.S. Census Bureau American Community Survey, 1-Year Estimates

Table 13: Benefits of Education

Individual Benefits	Societal Benefits
<ul style="list-style-type: none"> Increased earnings Increased economic mobility Healthier lifestyle More likely to receive employer-provided health insurance More likely to do educational activities with their children 	<ul style="list-style-type: none"> Increased GDP Decreased crime Increased volunteerism Increased voter participation Increased tax contributions Lower unemployment rate Reduced reliance on public assistance Reduced healthcare costs Decreased poverty rate

Source: Kem C. Gardner Policy Institute based on literature review

Figure 20: Utah Poverty Rate by Educational Attainment, 2019



Note: These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: U.S. Census Bureau American Community Survey, 1-Year Estimates

Reduced Unemployment and Poverty Rates

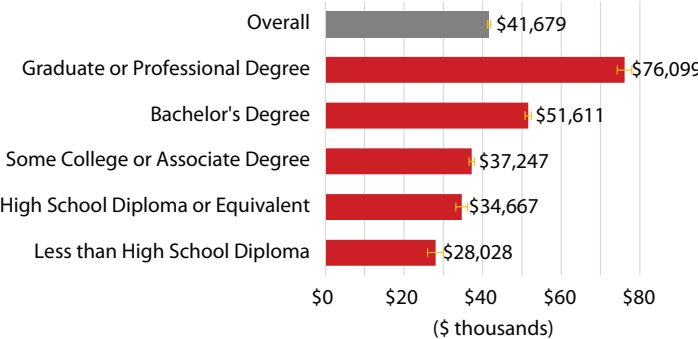
Postsecondary education continues to be increasingly critical to success in the workplace. Those without a high school diploma face unemployment rates twice as high as those with a bachelor's degree or higher (see Figure 19). Additionally, those without a high school diploma are more than four times as likely to live in poverty compared with those with a bachelor's degree or higher (see Figure 20).

Occupations that require some level of higher education are expected to grow faster over the next several years. Most of the occupations projected to grow the fastest require postsecondary education (e.g., physician assistants, software developers, statisticians) while those projected to decline fastest have minimal education requirements (e.g., parking enforcement workers, typists, telephone operators).²⁰ From an individual perspective, obtaining postsecondary training greatly increases the likelihood of finding employment. From a societal perspective, businesses need access to skilled workers to keep the economy functioning optimally.

Increased Wages, GDP, and Tax Revenues

Not only are individuals with postsecondary education more likely to be employed, they are more likely to be employed in higher-wage jobs. Figure 21 shows median income by educational attainment in Utah. Income rises with increases in education. While this data is correlative, previous research explores the causative effects of higher education on wages. At Utah’s technical colleges, the 2011–2016 cohorts showed an average wage growth of 59.3% (\$10,850) from the year prior to the year after obtaining a one-year or two-year certification.²¹ A similar study was conducted for USHE’s degree-granting institutions. Those receiving a certificate from these institutions earned approximately \$6,000 per year more than someone with a high school diploma in their first year following completion of the certificate. This impact nearly doubles to \$12,000 per year for someone earning a bachelor’s degree. Increases are even greater for those earning graduate level degrees and likely continue to grow throughout individuals’ careers.²² A growing body of national research also supports the causal claim that educational attainment impacts earnings.^{23, 24, 25} Additional research shows the wage disparity between those with and without postsecondary education is growing.²⁶

Figure 21: Utah Median Annual Income by Educational Attainment, 2019



Note: These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.
Source: U.S. Census Bureau American Community Survey, 1-Year Estimates

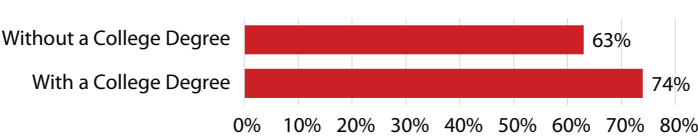
Higher wages can improve quality of life for the individual and indirectly improve society through increases in tax collections and GDP growth. As incomes rise, so do income tax revenues. Those with higher incomes have also been shown to have increased consumption which grows GDP and increases sales tax collection. Utah households where an individual holds a master’s degree or higher spend 2.5 times more than households with high school education alone.²⁷ Nationally, four-year college graduates paid 82% more in taxes on average when compared with high school graduates. Those with a professional degree made tax payments more than three times higher than high school graduates.²⁸

Increased Economic Mobility and Reduced Reliance on Public Assistance

Education is also associated with improved economic mobility. Students coming from an economically disadvantaged background generally have worse outcomes both educationally and economically. However, obtaining education can help reduce these disparities. The likelihood of an individual having a higher family income than their parents’ is more than ten percentage points higher for those with a college degree compared with those without (see Figure 22). When individuals attend similar postsecondary institutions, the share of students reaching the top two income quintiles as adults is similar for students with parents in the lowest income quintile and those with parents in the top income quintile.²⁹ Additionally, those with high school diplomas or less have lower incomes than their counterparts from previous generations at similar points in their lives, while those with higher educational attainment have higher incomes by the same metric.³⁰

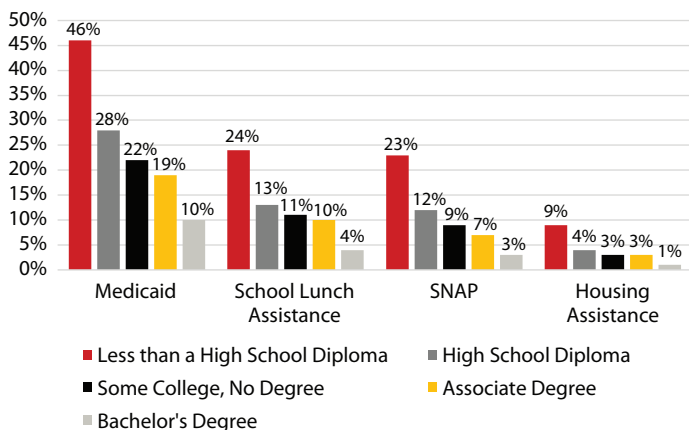
As individuals receive more education, they are also much less likely to rely on public assistance. Since these programs are funded primarily by taxpayer dollars, reduced reliance on these programs not only benefits the individual but society as a whole. National data (shown in Figure 23) indicate that those with higher educational attainment rely less on many public programs, including Medicaid, school lunch assistance, Supplemental Nutrition Assistance Program (SNAP), and housing assistance.

Figure 22: U.S. Economic Mobility
(Share of Children with Family Income Above Their Parents’ Family Income, by Child’s Education Level)



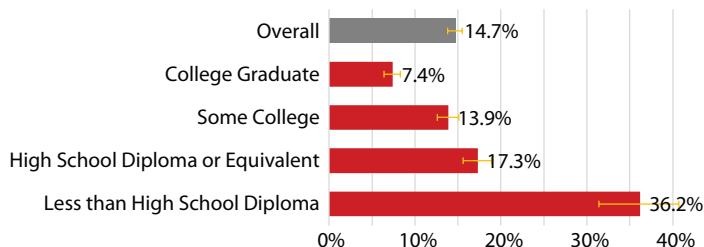
Note: Economic mobility between the parental generation of the 1960s and 1970s and their adult children.
Source: Brookings Institute³²

Figure 23: Share of U.S. Adults 25+ Living in Households Participating in Various Public Assistance Programs by Educational Attainment, 2018



Source: CollegeBoard report analysis of U.S. Census Bureau Current Population Survey data

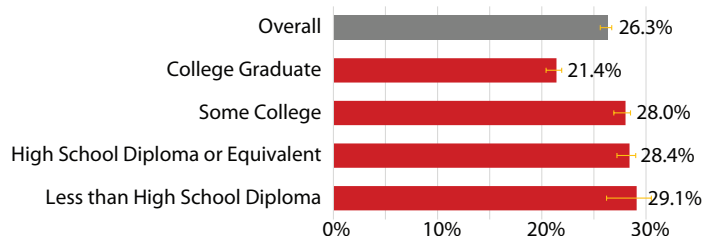
Figure 24: Share of Utah Adults Who Reported Fair or Poor General Health by Educational Attainment, 2019



Note: Age-adjusted. These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence."

Source: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Center for Health Data and Informatics, Utah Department of Health. Retrieved 12 July 2021 from the Utah Department of Health, Indicator-Based Information System for Public Health web site: <http://ibis.health.utah.gov>

Figure 25: Utah Adult Obesity Rates by Educational Attainment, 2019



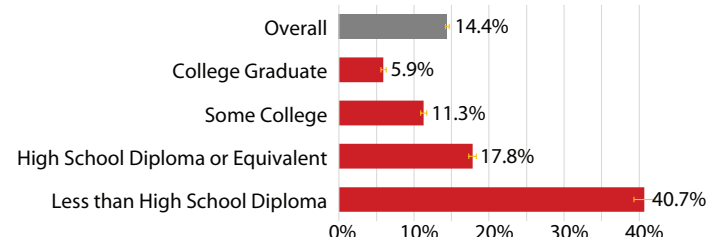
Note: Age-adjusted. These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

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Better Health Outcomes

While economic benefits abound, more education is also associated with better health outcomes, including being less likely to report fair/poor general health, lower obesity rates, lower uninsured rates, and being more likely to exercise, and less likely to smoke (see Figures 24–28).

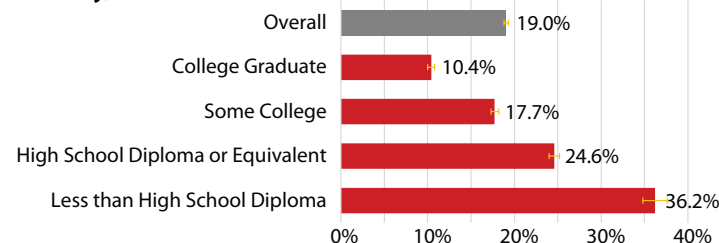
Figure 26: Utah Uninsured Rates by Educational Attainment, 2019



Note: Age-adjusted. These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence."

Source: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Center for Health Data and Informatics, Utah Department of Health. Retrieved 12 July 2021 from the Utah Department of Health, Indicator-Based Information System for Public Health web site: <http://ibis.health.utah.gov>

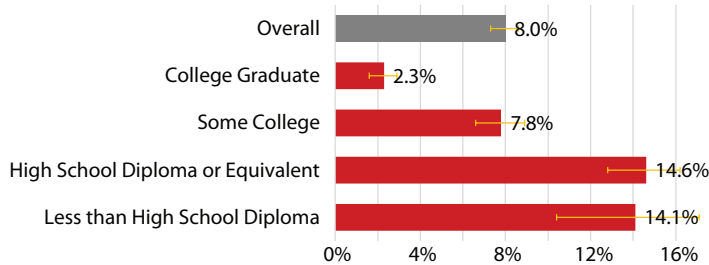
Figure 27: Share of Utah Adults Reporting No Physical Activity, 2019



Note: Age-adjusted. These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Center for Health Data and Informatics, Utah Department of Health. Retrieved 12 July 2021 from the Utah Department of Health, Indicator-Based Information System for Public Health web site: <http://ibis.health.utah.gov>

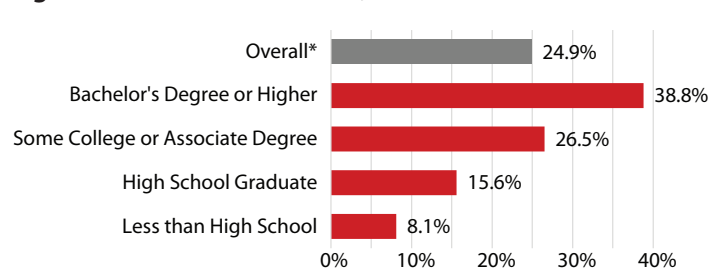
Figure 28: Utah Smoking Rates by Educational Attainment, 2019



Note: Age-adjusted. These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Center for Health Data and Informatics, Utah Department of Health. Retrieved 12 July 2021 from the Utah Department of Health, Indicator-Based Information System for Public Health web site: <http://ibis.health.utah.gov>

Figure 29: U.S. Volunteer Rate, 2015



Note: *16+. Educational attainment groups include population 25+. Subject to error but error not available.

Source: Bureau of Labor Statistics

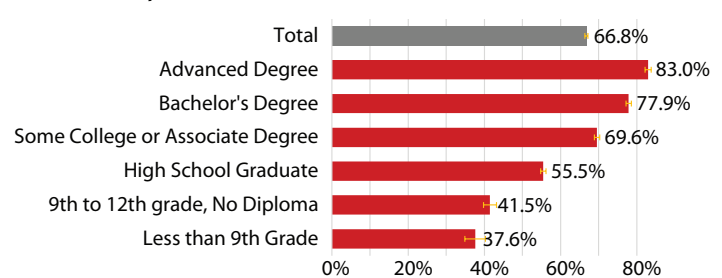
Volunteerism and Civic Engagement

While those with more education receive many personal benefits, they are also more likely to give back to their community. Rates of volunteerism rise steadily with increasing levels of education (see Figure 29). Educational attainment is also associated with greater voter participation. Eighty-three percent of those with an advanced degree participated in the November 2020 election, more than 40 percentage points higher than those with less than a high school diploma, as shown in Figure 30.

Improved Outcomes for Children

Education not only improves outcomes for the recipient but can also positively impact their children. Parents with higher educational attainment are more likely to enroll their children in preschool programs (see Figure 31) and engage them in a wide variety of educational activities, potentially improving outcomes for generations beyond the original recipient.³¹

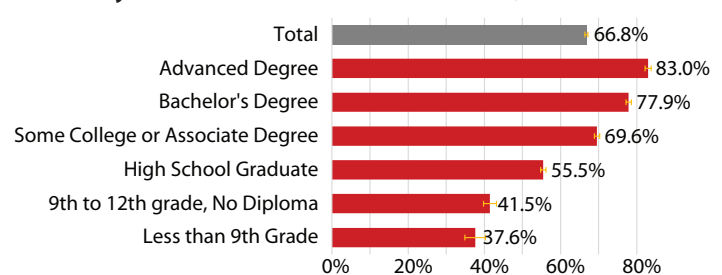
Figure 30: U.S. Voter Participation Rate by Educational Attainment, November 2020 Election



Note: Population 18+, share of U.S. citizens who reported voting in the November 2020 election. These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: U.S. Census Bureau, Voting and Registration in the Election of November 2020, Table 5

Figure 31: Share of U.S. Children Age 3 to 5 Enrolled in School by Parent's Educational Attainment, 2019



Note: Highest education level of any parent residing with the child (including an adoptive or stepparent). Includes only children who resided with at least one of their parents. These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: National Center for Education Statistics, Table 202.20

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