

MYTHS, MISINFORMATION, AND UPWARD MOVEMENT: WHY HIGHER EDUCATION MATTERS

EXECUTIVE SUMMARY



In recent years, there has been a growing sentiment among Washington leaders and educators that “not all students need to go to college” – implying, perhaps, that (some or most) students do not need a post secondary credential – especially a bachelor’s degree – to be successful in Washington’s growing economy. This opinion may be enticing for those hoping to avoid years of schooling or potential debt; and those who hold this opinion likely mean well by these sentiments, but they rely on outlier cases that misconstrue the realities of workforce demand, student debt load, and the potential for interrupting intergenerational cycles of poverty. **Washington STEM aims to set the record straight: we need to support more students to be prepared for and to complete all types of postsecondary pathways – apprenticeships, certificates, associate’s degrees, and bachelor’s degrees.** In our haste to lift up and call out certain pathways, we must not, at the same time, degrade or devalue bachelor’s degrees or the institutions that confer them.

MYTH 1: “THERE ARE PLENTY OF JOBS THAT DON’T REQUIRE A COLLEGE DEGREE.”

FACT: Fewer than 30 percent of the job openings that pay a family-sustaining wage over the next 10 to 15 years will require solely a high school diploma (70 percent will require a credential).¹

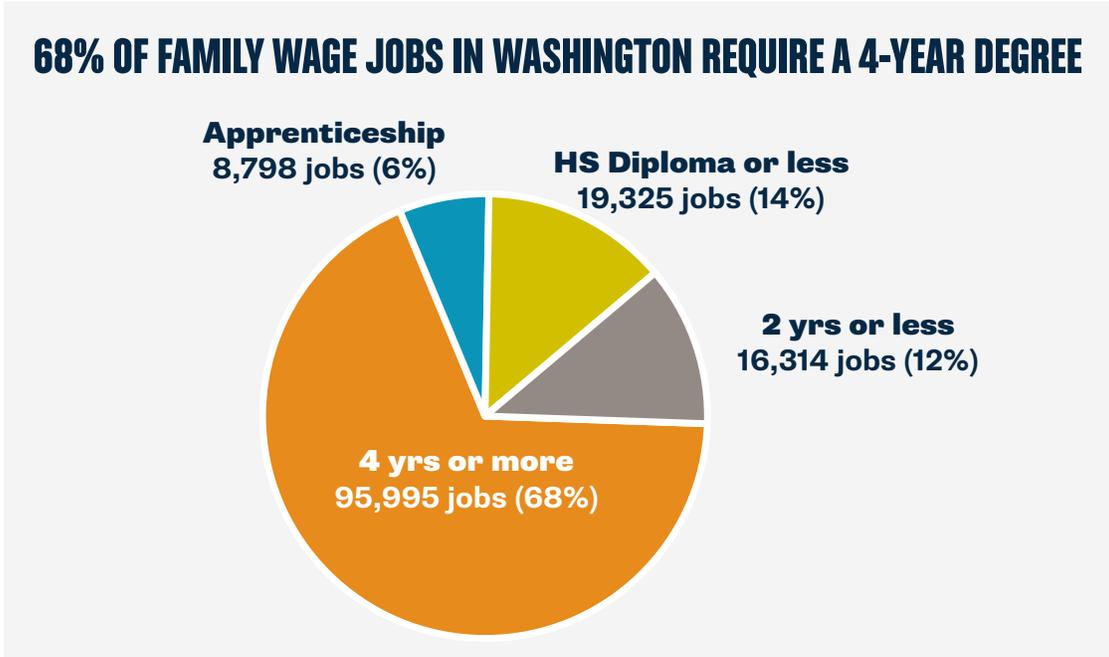
FACT: Every single region of our state has a large supply-demand gap for jobs that require a bachelor’s degree; this gap is bigger than any other type of credential gap.² This means that companies are more likely to import bachelor’s degree holders from out of state,³ and it means that home-grown students are more likely to be the lowest wage-earners in our state.⁴



Getting a **bachelor’s degree** is the only and best predictor in a student’s control of earning a good wage in Washington state.⁵ Outside of uncontrollable factors, getting a bachelor’s degree can narrow the racial **income gap by up to 70%**.

FACT: We need more students to complete bachelor’s degrees and other postsecondary credentials like apprenticeships, career certificates, and associate’s degrees; this is not an either-or situation, so making the claim that students don’t need to get a college degree creates a false comparison that one kind of credential or path is better than another—that’s bad for everyone and bad for our economy.

FACT: While many companies are considering or have started to drop bachelor’s degree requirements for jobs, those cases make up 15 percent or less of the available jobs and still require individuals to have significant work experience and skills, which reinforces the already large opportunity gap that underserved students face in attaining family-sustaining jobs



MYTH 2: “SOME STUDENTS WOULD BE BETTER SERVED BY NON-COLLEGE PATHWAYS.”

FACT: Bachelor’s degrees are more likely to interrupt intergenerational cycles of poverty and to close race-based and income-based equity gaps than any other pathway, making them especially important as an option for low-income students and students of color.



FACT: College provides social capital, access to high-quality learning experiences, and a level playing field for access to things like internships – all of which may have been inaccessible to students prior to leaving the K-12 system. This means that participation in college can make up for significant disadvantages like poverty, racism, and other structural barriers a student may experience in their life.

MYTH 3: “COLLEGE IS ELITIST AND AN EXPENSIVE CONSTRAINT; STUDENTS WILL BE BURIED IN DEBT WITH NOTHING TO SHOW FOR IT.”

FACT: Washington has some of the most accessible, diverse, and low-income, student-friendly colleges in the nation. While racial and income gaps⁶ are still an issue in our state, we have a top-10 community college system and a top-10 poverty-serving baccalaureate rating in the U.S.

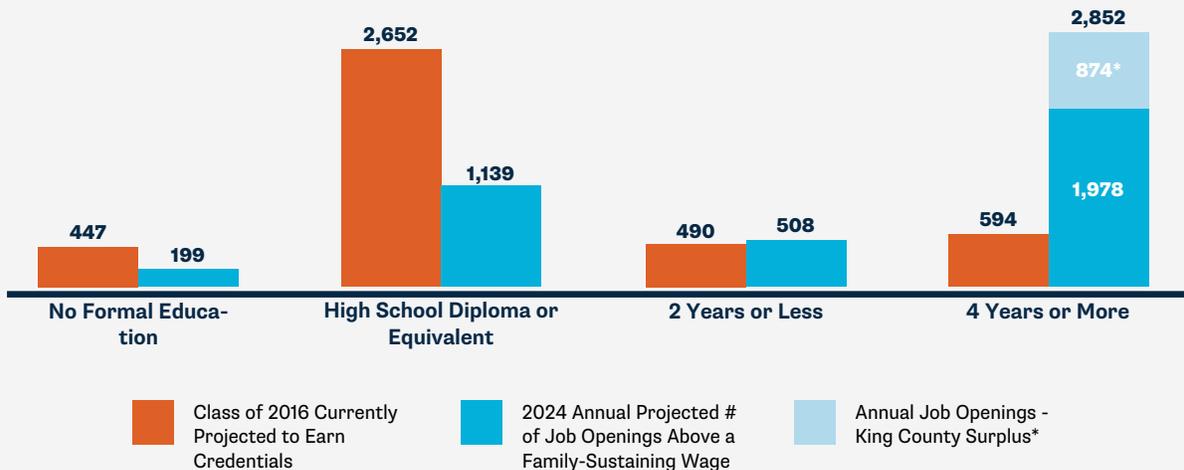
FACT: Students who graduate from Washington colleges have some of the lowest debt (bottom 10) among all 50 states;⁷ this is despite the fact that we also have some of the lowest financial aid completion rates (ranked bottom five) in the U.S.⁸

FACT: College credentials, and specifically bachelor’s degrees, still provide the surest way to access life-long career and family-sustaining jobs, economic stability, and civic engagement.

THE SUPPLY-DEMAND GAP FOR BACHELOR’S DEGREES

As technology and automation increase in every thriving industry in our state, even our most rural regions have more job openings that will require bachelor’s degree holders than any other type of credential. For example, the North Central region of Washington⁹ will have hundreds of openings for nurses, K-12 teachers, and computer scientists. The region’s agriculture and manufacturing employers are hiring individuals who can operate complex computer-controlled technology, and they have to import talent from out-of-state if local students don’t earn the bachelor’s degrees that get them ready for these great jobs.

NORTH CENTRAL REGION SUPPLY-DEMAND PROJECTIONS



*Over the next 12 years, there will be a surplus of jobs in King County compared to the number of new, local, credentialed individuals in King County. That means that if other regions throughout the state only attended to their own regional job openings, King County would be solely under-supplied by Washington state-originating kids. This surplus represents a proportion of the surplus jobs that could be supplied by students from the North Central Region.

WHAT MESSAGE ARE YOU SENDING?

“Not all students should/need to go to college.”

INTENT: There are jobs that pay well and don't require a degree.

IMPACT: Students who already face systemic barriers hear in this message that they can skip college, when in fact these students need to attend college to earn a good, family wage.

“There are plenty of jobs that don't require you to go to college.”

INTENT: Save yourself the time and money; you'll be just fine getting a job without a degree.

IMPACT: Students have the incorrect assumption that there are many jobs that will sustain them and their future families without having to get a degree, when in fact over 68 percent of the jobs that pay enough to sustain families will be held by individuals with bachelor's degrees.

**To download this executive summary and the full report, visit:
www.washingtonstem.org/STEMbythenumbers.**

This research was generously made possible by The Boeing Company.

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REPORT



In recent years, there has been a growing sentiment among Washington leaders and educators that “not all students need to go to college” – implying, perhaps, that (some or most) students do not need a post secondary credential – especially a bachelor’s degree – to be successful in Washington’s growing economy. This opinion may be enticing for those hoping to avoid years of schooling or potential debt; and those who hold this opinion likely mean well by these sentiments, but they rely on outlier cases that misconstrue the realities of workforce demand, student debt load, and the potential for interrupting intergenerational cycles of poverty. The statement “not all student need to go to college” fosters a growing sentiment that colleges – especially baccalaureate institutions and universities--are elitist and exclusive. It implies that students can forgo higher education and still thrive in Washington’s growing and robust economy. The view that individuals can bypass a postsecondary education for more immediate and lucrative options not only ignores basic labor market information and hiring trends,¹⁰ but it also undermines efforts to close pervasive equity gaps among our state’s K-12 students.¹¹ **Washington STEM aims to set the record straight: we need to support more students to be prepared for and to complete all types of postsecondary pathways – apprenticeships, certificates, associate’s degrees, and bachelor’s degrees.** In our haste to lift up and call out certain pathways, we must not, at the same time, degrade or devalue bachelor’s degrees or the institutions that confer them.

In this report, Washington STEM provides research and data that bust commonly held beliefs about the relative value of baccalaureate education, explicitly addressing the importance higher education has on Washington state’s economy, efforts for social justice, individual outcomes, and choice.

REVIEW OF THE CLAIM

One common justification made for why “not all students need to go to college” is that there are a high number of jobs available in Washington state that do not require a college degree. Over the past year, Washington STEM worked with job projection labor market data and postsecondary credential information, summarized in a series of reports called STEM by the Numbers.¹² Our researchers found that current Washington statewide projections show a local postsecondary credential gap of 79,165 by 2030. In other words, only

35,484 students of the 85,158 in the class of 2022 (current ninth graders)¹³ are projected to earn a postsecondary credential within eight years of their expected graduation (2030) while, by that same year, there will be approximately 114,649 family-sustaining jobs that require such a credential.¹⁴ Given this talent gap, if we do not intervene, most of these jobs will be filled by individuals who were educated outside of Washington state, and employers will be enticed to leave the state or country to find the workers they need.

For example, in King County, projections for 2024 anticipate a surplus of occupations requiring a bachelor's degree or higher (a skill gap of approximately 40,000 jobs). These surplus jobs are condensed in the region's top occupations: software development, electrical trades, financial analysts and accountants, and medical assistants and nursing. Occupations requiring a two-year (or less) credential are projected to have a skill gap of 5,143 jobs by 2024. In contrast, occupations providing a family-sustaining wage jobs with a high school diploma or equivalent reflect a total of 6,669; yet, projections estimate a total of 15,263 employees will be left competing for these occupations. So, there will be a surplus of credentialed positions and a deficit of those requiring no credential beyond high school.

Meanwhile, for the high school class of 2022, we currently project too many of them will not complete a credential and then won't be able to find a family-sustaining wage job that only requires a high school diploma. In other words, this means that there will be 46,522 uncredentialed students competing for just 31,444 jobs that provide a family-sustaining wage.¹⁵ Much of this group will thus have to settle for lower-paying and often less secure jobs. As a state, we need to do a better job of preparing students to be competitive for the types of jobs that exist and that pay enough to sustain a family. That means continuing to raise high school graduation rates and, crucially, increasing the rates at which graduates achieve postsecondary credentials with labor market value.

In a recent article by CNBC, titled *Why IBM wants to hire employees who don't have a 4-year college degree*, authors state that "IBM's vice president of talent Joanna Daley told CNBC *Make It* that about 15% of her company's U.S. hires don't have a four-year degree." While that statement may be true, CNBC and many other sources fail to recognize other contextual factors that impact employment including occupational access to opportunity, income requirements for a family-sustaining wage job, and, most critically, the surplus of potential employees competing for a limited number of family-sustaining jobs that do not require a credential.¹⁶ Despite examples like IBM, labor market and postsecondary credential data reveal that very few family-sustaining job opportunities exist for individuals without postsecondary credentials. Thus, with inadequate levels of credential attainment, Washington originating students are not prepared for what the future labor market demands.

Washington state labor market projections reveal that our state needs more students completing apprenticeships, career certificates, associate's degrees, and bachelor's degrees. Importantly, this is *not* an either-or situation, and making the false claim that students do not need to get a college degree implies incorrectly that one kind of credential or path is better than another. While some companies have either dropped or are considering whether to lower requirements for bachelor's degrees for certain jobs, those cases make up only 15 percent or less of available employment and still require individuals to have significant work experience and skills.

In the state of Washington, only 56.1 percent of residents hold a postsecondary degree¹⁷ (35.1 percent of the population age 25 and older hold a bachelor's degree), while 9.9 percent hold an associates degree. A report published by Georgetown University's Center on Education and the Workforce (2013), outlines that by 2020, 65 percent of all jobs in the U.S. economy will require postsecondary education. The report also highlights that the most substantial growth will be in the industrial clusters of healthcare, community services, and STEM.

Washington state labor market data reveals that fewer than 30 percent of the job openings that pay a family-sustaining wage over the next 10-15 years will require only a high school diploma, while 70% will require a postsecondary credential. A vast majority of these new occupations will be in STEM-related occupations.¹⁸ A Washington STEM report analyzing Credential by Opportunity and Region Industry¹⁹ (CORI) crosswalk data found that each of the ten Washington STEM network regions²⁰ and the King County STEM Partnership currently hold a large supply-demand gap for occupations requiring a bachelor's degree. The skill gap is more significant than gaps for any other type of credential (two-year, certificate, apprenticeship, professional/graduate degree), meaning that employers are most likely to import bachelor's degree holders.

ECONOMIC TRENDS

In a report examining Washington state's five-year career outlook, researchers estimate that 260,000 jobs will be created in the occupation clusters of healthcare, STEM, education, manufacturing, and construction for the state of Washington.²¹ These occupations will all require some type of postsecondary credential. The U.S. Bureau of Economic Analysis reports that Washington state's economy is growing at an unprecedented rate with a Gross Domestic Product (GDP) growth rate of 4.4 percent. The state's growing economy and the job market have forced businesses in Washington state to recruit outside talent and leave thousands of occupations unfilled.

HIGHER EDUCATION AND CHOICE

Another common fallacy is that higher education institutions are elitist and perpetuate poverty in our nation. This fallacy ignores the fact that higher education is a crucial pathway towards social mobility in spite of marginalization. Two reasons people believe colleges are elitist and perpetuate poverty are the highly homogenous composition of these institutions and the idea that students will be left with large amounts of student debt with nothing to show for it. Despite these ideas, college credentials, and specifically bachelor's degrees, still provide the surest way to access lifelong career and family-sustaining jobs, economic stability, and democratic engagement.

According to the U.S. Department of Education, the unemployment rate for college graduates is about 2.5 percent, that is half of the national average.²² College Board²³ reports any college experience produces measurable benefit compared with no postsecondary education, but the benefits of completing a bachelor's degree or higher are significantly greater. Higher levels of education also provide societal benefits including lower unemployment rates and a host of associated economic benefits. Bachelor's degree holders also contribute more to the tax base, are less likely to depend on government subsidies, have lower smoking rates, have lower rates of incarceration, and have higher levels of civic participation (volunteering, voting, and donating blood) regardless of race.

While racial and income gaps are still an issue in Washington state; completing a four-year degree (or higher) can interrupt intergenerational cycles of poverty and close race-based and income-based equity gaps at a greater rate than any other pathway, making them especially valuable as an option for low-income students and students of color. Universities across the state of Washington are pushing for a less homogeneous student body; the University of Washington reports nearly 35 percent of undergraduates enrolled across UW Bothell, UW Tacoma, and UW Seattle are the first in their family to pursue a four-year degree.

The State of Washington has some of the most accessible, diverse, and low-income-student-friendly colleges in the nation, with a top-10 community college system and a top-10 poverty-serving baccalaureate rating in the US.²⁴ Students who graduate from Washington State colleges have some of the lowest debt²⁵ (bottom 10) among all 50 states (owing an average of less than \$25k after completing their degree); this is despite the fact that Washington state also has some of the lowest financial aid completion rates (ranked bottom five) in the US.

While some may argue that certain students would be better off not pursuing college, the reality is that students furthest from opportunity have the most to gain by pursuing a bachelor's degree. Without nepotism, access to opportunity and the guidance privilege affords, students who face the most hurdles may be left to fend for fewer and generally lesser opportunities available to uncredentialed workers.

The income gaps between credentialed and non-credentialed workers are telling. For instance, among black adults, the annual income difference for those with a bachelor's degree (\$59,027) as opposed to a high school diploma (\$28,438) is approximately \$30,589. For Hispanic adults, the annual income difference for a bachelor's degree-holding adult (\$58,493) versus a high school diploma (\$30,329) is approximately \$28,164. These wage disparities provide evidence to support the idea that post-secondary education can work to level out the playing field for students of color, individuals originating from poverty and those from rural areas. Higher education is a means of providing students with not only work-related skills and knowledge but an avenue to accessing opportunity and networks.

In a recent poll, first-generation students of color reported value the of mentorship, advisors, understanding their rights, and how to navigate the plethora of resources developed to help college students access the workforce.²⁶ College provides social capital, access to privilege, and a level playing field for access to experiential learning—all of which may have been inaccessible to students prior to exiting the K-12 system; this means that participation in college can make up for significant disadvantages like poverty, racism, and other structural barriers a student might experience in their lives.

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ENDNOTES:

- ¹ Credential refers to any postsecondary degree or certificate. Source: Washington Kids for Washington Jobs Report, Washington Roundtable: https://www.waroundtable.com/wp-content/uploads/2017/03/WKWJ_FINAL_Report.pdf
- ² Including two-year, certificate, apprenticeship, and industry training credentials.
- ³ This is expensive for them – companies can incur between \$10,000 and \$250,000 in loss related to a single employee’s turnover from costs of recruitment, relocation, new hire training, and lost production time. Source: Bliss-Gately Tool, “Business Costs and Impacts of Turnover,” <http://www.gatelyconsulting.com/PRCOSToT.htm>
- ⁴ Out-of-state imported employees are more likely to be better educated and have better access to higher-paying jobs than our own state’s K-12 originating students. Source: Washington State Workforce Board, “Talent & Prosperity for All,” retrieved from: <http://www.wtb.wa.gov/documents/tapstrategic2016.pdf>
- ⁵ Outside of earning a bachelor’s degree, race, zip code, and household income are the biggest predictors of a student’s wages five years after exiting high school (and are all things over which students have little to no agency).
- ⁶ Education Pays, The Benefits of Higher Education for Individuals and Society, 2013: <https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf>
- ⁷ LendEDU Student Loan Debt by School by State Report for the Class of 2017: <https://www.globenewswire.com/news-release/2018/08/15/1552159/0/en/LendEDU-Releases-Third-Annual-Student-Loan-Debt-by-School-by-State-Report-for-the-Class-of-2017.html>
- ⁸ Current FAFSA rates by state: <https://national.fafsatracker.com/currentRates>
- ⁹ This region spans Okanogan, Ferry, Grant, Adams, Chelan, and Douglas counties.
- ¹⁰ Washington Kids for Washington Jobs, Washington Roundtable/Partnership for Learning (Boston Consulting Group): https://www.waroundtable.com/wp-content/uploads/2017/03/WKWJ_FINAL_Report.pdf
- ¹¹ RCW 28A.300.1362
- ¹² STEM by the Numbers, WA STEM: https://washingtonstem.org/focus_area/stembythenumbers/#Measuring_Impact
- ¹³ Credentials here are any postsecondary education degree or certificate beyond a high school diploma, including apprenticeship completions and professional licenses. For a detailed list of what is considered such a credential, see <https://erdc.wa.gov/sites/default/files/publications/201507.pdf>. High school classes are also known as “adjusted 5-year cohorts” is calculated as the total number of students identified in ninth grade as belonging to this high school graduating class, who are reported after the fact as graduating no later than the 2015-2016 school year (i.e, within one year of their originally expected graduation year).

- ¹⁴ Authors' estimates calculated from: [2017 WA ESD Separations, 2017 WA ESD Occupational Employment and Wage Estimates, MIT Living Wage Calculator, BLS education and Training.](#)
- ¹⁵ Authors estimates calculated from: 2018 WA ESD Separations, 2018 WA ESD Occupation Employment and Wage Estimates, MIT Living Wage Calculator.
- ¹⁶ Labor Market Dashboard, WA STEM: https://washingtonstem.org/focus_area/stembythenumbers/
- ¹⁷ Education attainment, Office of Financial Management, 2016 <https://www.ofm.wa.gov/washington-data-research/statewide-data/washington-trends/social-economic-conditions/educational-attainment>
- ¹⁸ Bridging the Gap, A Strong Demand for STEM Talent, WA STEM: https://washingtonstem.org/focus_area/stembythenumbers/#Measuring_Impact
- ¹⁹ WA STEM internally gathered publicly available data from Washington Employment Security Department (ESD)Office of the Superintendent of Public Instruction (OSPI), Washington Office of Financial Management (population projections) (OFM), Washington State Board for Community and Technical Colleges (SBCTC), Four year public institutions of higher education (CoP + UW & WSU especially), The Integrated Postsecondary Education Data System (IPEDS), Washington State Department of Labor and Industry (L&I) - Apprenticeship Registration and Tracking (ARTS),MIT Calculator, O*NET, NCES, and BLS to create a crosswalk that maps high demand family- sustaining occupations to supply and demand shortages by individual region.
- ²⁰ Washington STEM supports partners in the King County region and also supports STEM networks in the other ten workforce development areas (WDAs) across the state: Apple STEM Network (North Central WDA), Capital Region STEAM Network (Pacific Mountain WDA), Mid-Columbia STEM Network (Benton-Franklin and Eastern WDAs), Skagit STEM Network (Northwest WDA), Snohomish STEM Network (Snohomish WDA), South Central Washington STEM Network (South Central WDA), Spokane STEM Network (Spokane and Eastern WDAs), Tacoma STEAM Network (Pierce WDA), West Sound STEM Network (Olympic Consortium WDA).
- ²¹ The path to 70% Washington Roundtable & The Boston Consulting Group.
- ²² Advanced Diversity and Inclusion in Higher Education: <https://www2.ed.gov/rschstat/research/pubs/advancing-diversity-inclusion.pdf>
- ²³ Education Pays, The Benefits of Higher Education for Individuals and Society, 2013: <https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf>
- ²⁴ US News source: <https://www.usnews.com/best-colleges/wa>
- ²⁵ In Washington, average college debt is lower than most other states: <https://www.seattletimes.com/education-lab/washington-state-ranks-40th-in-average-college-debt-per-student/>
- ²⁶ Students First: Improving First-Generation Student Retention and Performance in Higher Education: <http://www.drpeterjcollier.com/images/SFMPfinalreport2005-08.pdf>