



The Future of Attainment in Arizona

Expanding Educational and
Professional Opportunities
After High School

FALL 2025



About Education Forward Arizona

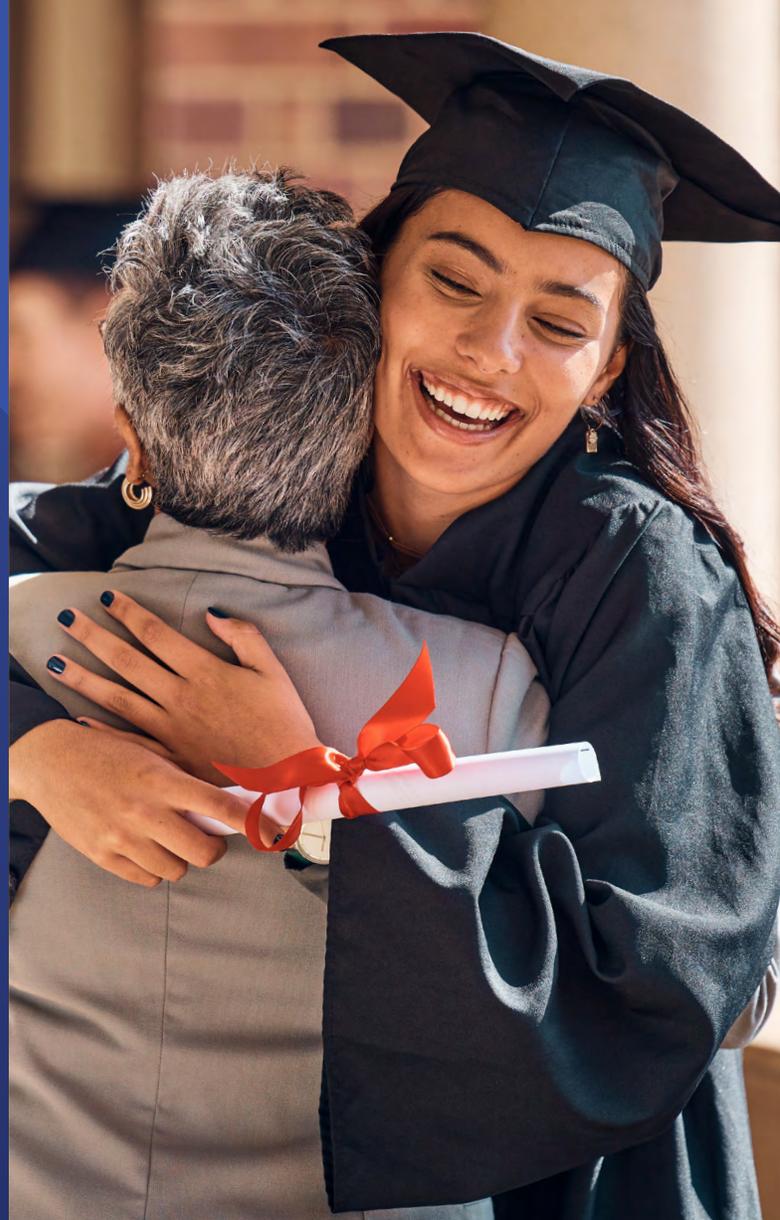
Education Forward Arizona advocates for and acts on education improvements that advance the quality of life for all Arizonans. Education Forward Arizona represents the willingness of people from all parts of the state—those of different races and ethnicities; those from rural, suburban, and urban areas; and those from business, education, philanthropic, nonprofit and other sectors—to work differently, collaboratively and more effectively to create better education opportunities, from early learning through postsecondary attainment.

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Introduction

Education and training after high school are widely recognized as critical drivers of Arizona’s future economic prosperity and quality of life for all residents. In our rapidly changing economy, nearly 7 in 10 jobs in Arizona will soon require some form of education beyond high school as employers seek workers with advanced skills and credentials.

The demand for a skilled workforce with education and training beyond high school is a multidimensional challenge for our state. It is essential that we strengthen and deepen our workforce to continue to attract and retain the types of companies and investments that have powered Arizona’s exceptional growth in recent decades.

At the same time, this need to build a stronger workforce comes at a time when our state is facing a demographic contraction. As Arizona Town Hall notes, “the natural birth rate in Arizona will not replenish the death rate, and the number of persons turning 18 (as a percentage of the total population) is projected to decrease through 2050.”¹ Migration will soon become the sole driver of Arizona’s population growth, the implication being that we will only grow if we continue to be able to attract people to our state.

The talent that Arizona has attracted to date has contributed to our recent economic growth, but we cannot solely rely on “imported” talent. In addition to bringing in the talent that Arizona employers need, we must also grow our local talent pipeline and ensure Arizona’s young people and working-age adults have ample opportunities to build the skills and earn the credentials that will enable them to thrive in our rapidly advancing economy.

Leaders across the state (in government, business, education, and philanthropy) have rallied around ambitious goals to raise educational attainment. The Achieve 60 AZ goal—which challenges us to ensure that 60 percent of adults aged 25–64 hold a certificate, license, or degree by 2030—has been a powerful focal point for efforts to improve education outcomes in Arizona and strengthen our workforce to meet the changing needs of industries and employers in our state.

Now that we are in the last five years of the goal period, with 2030 fast approaching, the imperative is to do all we can as a state to reach 60 percent attainment. More than that, we must look past our short-term attainment goal to consider more expansive ambitions and strategies that position Arizona for continued growth and prosperity. Through 2030 and beyond, Arizona faces a dual task of rapidly increasing quantity and quality in education-to-workforce alignment. We must produce significantly more workers with education and training after high school, and ensure that the types of skills developed and credentials earned closely match the requirements of the jobs being created.

This report describes the considerations that have made attainment a priority for Arizona, ways of thinking about and measuring our progress, opportunities and challenges we face, and the strategies we should consider as we look to the future of our state.



¹ Arizona Town Hall. *The Arizona We Want: Demographics and Population Trends*, 2023. Arizona Town Hall

Why Arizona Has Rallied Around Attainment

Economic research clearly shows the value that having an educated populace confers to communities and states. Individuals with education and training beyond high school earn more than those without, on average, and they typically benefit from more opportunities in the workforce, greater economic mobility, and even better health. Communities and states benefit, in turn, from increased tax revenues; lower spending on healthcare, crime, and social safety net programs; and a more productive workforce that is attractive to businesses.² All of this adds up to billions in economic gains every year for a state like Arizona, representing, if nothing else, a compelling offset to investments intended to improve education outcomes and attainment.

While the return on investment of attainment is significant, the opportunity cost of not ensuring that Arizona's populace is well-educated—and its workforce empowered with the education and training necessary to meet the needs of the employers and industries we hope to continue attracting—is potentially even greater. If the return on investment represents billions to gain, then the opportunity cost of not increasing rates of education and training after high school represents billions to lose.

² Belfield, C. et al. *Billions to Gain: The Economic Benefits of Investing in a More Educated Arizona*, Helios Education Foundation and Education Forward Arizona, 2023. <https://www.helios.org/media/lwbpv4uc/brief-the-economic-benefits-of-investing-in-a-more-educated-arizona.pdf>



The Achieve60AZ Goal

In the early 2010s, Arizona’s education and business communities worried that the state’s low postsecondary rates could hinder long-term economic growth. This led to the 2016 formation of Achieve60AZ, a cross-sector effort that united 150 community, business, philanthropic, and education organizations and 47 local governments behind a bold goal: by 2030, 60 percent of Arizona adults aged 25–64 would hold a degree or professional certificate. At the time this goal was set, Arizona’s attainment rate hovered below 40 percent, trailing the national average. Achieve60AZ was launched to focus and coordinate efforts to increase postsecondary participation and completion across the state.

Although the Achieve60AZ initiative was subsequently incorporated into the organization that is now Education Forward Arizona (of which the authors of this report are leaders), the 60 percent attainment goal—and the cross-sector collaboration that initiated it—remain an important touchstone for the state.

In the nine years since establishing the Achieve60AZ goal, we’ve made meaningful progress as a state. Our attainment rate has increased by seven percentage points, from 42 to 49 percent.³ But, to reach our goal of 60 percent by 2030, we will need to accelerate improvements statewide.



Everything to Gain

A skilled, qualified workforce in Arizona is inarguably essential for the entire state to benefit from a thriving economy and an improved quality of life. Despite this, we’ve done too little as a state to ensure that more Arizonans go on to additional education and training after high school so that they are ready for success in the industries and professions that our economy depends on.

The Everything to Gain campaign seeks to raise awareness of the benefits that come from strengthening the post-high school education-training ecosystem and increasing rates of participation and success in that ecosystem by learners, institutions, and employers. The campaign broadly shares data on existing public support for the state’s attainment goal. It seeks to build the political will to match the voting public’s will to see more opportunities for education and training after high school.

Learn more at: <https://everythingtogain.org/>

³ As measured according to the criteria of the Arizona Education Project Meter, a statewide tool co-developed by the Center for the Future of Arizona and Education Forward Arizona. Other sources use different criteria to define attainment and, consequently, report different rates.

Where We Stand as We Look to 2030 and Beyond

With 2030 fast approaching, Arizona still has a long way to go to reach its attainment goal. Even as we continue to make important improvements—and as collaborative initiatives throughout the state advance efforts to reshape how we approach education and training in and after high school—data from our K-12 schools and postsecondary institutions paint a sobering picture of our shortcomings.

Importantly, a several sets of indicators inform how we understand the health of Arizona’s public education systems, postsecondary attainment, and the challenges we face as a state. The Arizona Education Progress Meter, Lumina Foundation’s Stronger Nation research, and the annual attainment analysis produced by the Arizona Board of Regents all inform dynamic conversations about where we stand as a state and what the opportunities are to increase rates of postsecondary access, persistence, and completion.

The Arizona Education Progress Meter Shows How Far We Have To Go

Used statewide by policymakers, educators, and civic and business leaders, the Arizona Education Progress Meter tracks eight key indicators of how our state’s education systems are performing. Seven indicators track annual change; the most recent data show that despite some crucial improvements, our state remains far from reaching these key goals. Too few Arizona students graduate from high school and enroll in some form of post-high school education or training. Likewise, too few Arizonans have a degree or professional certificate or license.



QUALITY EARLY LEARNING
Percent of Arizona 3- and 4-year old children that are in quality early learning settings.



THIRD GRADE READING
Percent of Arizona 3rd grade students who scored Proficient or Highly Proficient on the Arizona Academic Standards Assessment (AASA) 3rd grade English language arts assessment.



EIGHTH GRADE MATH
Percent of Arizona 8th grade students who are prepared to be successful in high school math.



HIGH SCHOOL GRADUATION
Percent of Arizona high school students graduating in 4 years.



OPPORTUNITY YOUTH
Percent of 16-24 year olds in Arizona that are NOT going to school or working.



POST-HIGH SCHOOL ENROLLMENT
Percent of high school graduates enrolled in postsecondary education the year after graduating high school.



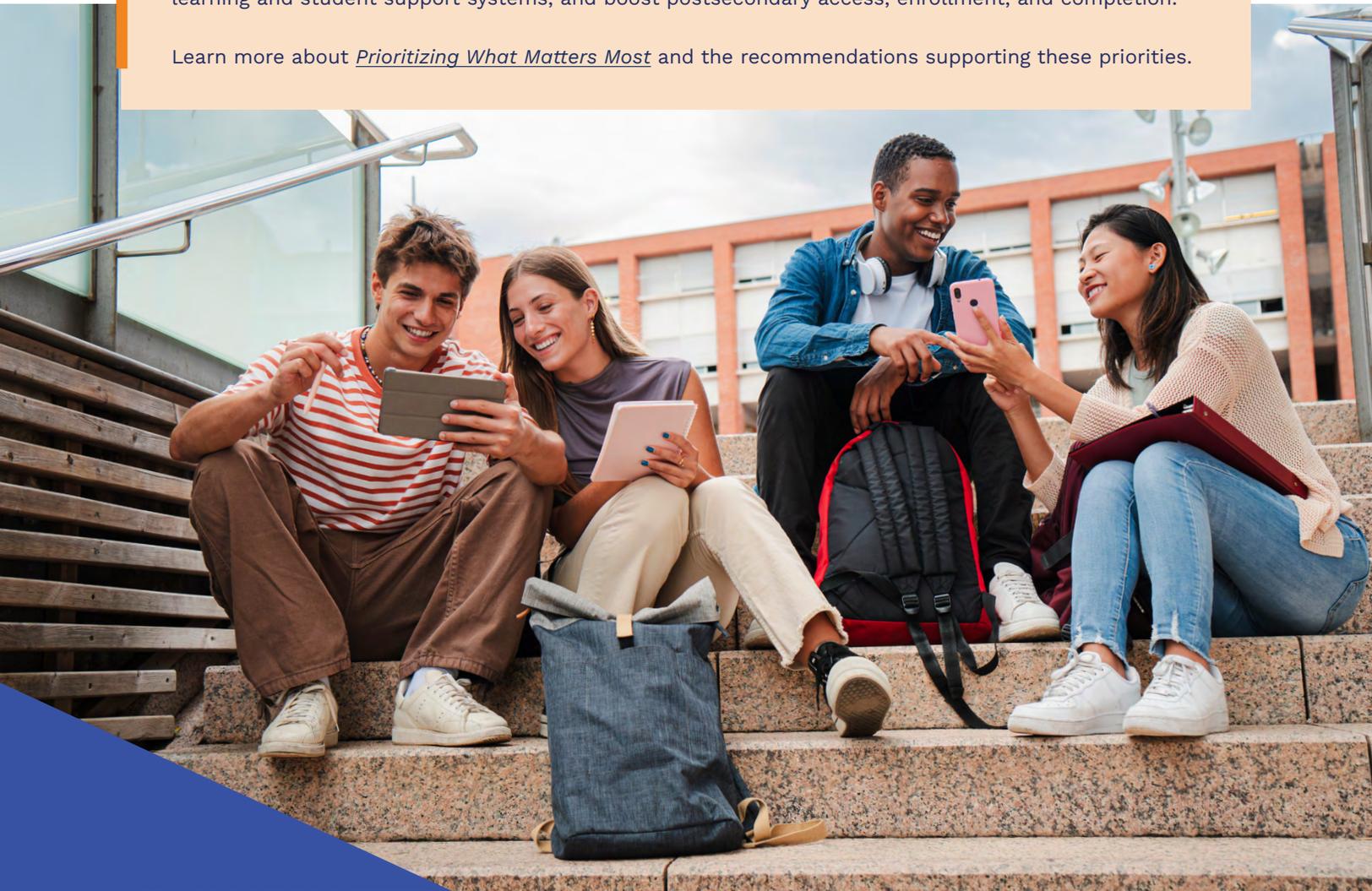
ATTAINMENT
Percent of Arizona residents 25-64 years of age who have completed a 2- or 4-year degree or who have an active professional certificate or license.

Significant educational disparities persist throughout Arizona, particularly as it relates to high school graduation and postsecondary attainment rates. White and Asian students consistently have higher rates of high school graduation and postsecondary enrollment and attainment. Notably, the attainment rate for Native American adults is below 20 percent, compared to over 50 percent for White adults. Latino adults also remain well below the statewide average for postsecondary attainment, despite representing one of the largest (and growing) segments of the K–12 population.

Actions to Improve P-20 Student Outcomes in Arizona

In January 2023, Education Forward Arizona released *Prioritizing What Matters Most: An Education Action Plan for Arizona to Meet the Achieve60AZ Goal*, which offered a focused set of non-partisan priorities for the state to improve student outcomes and increase attainment statewide. The result of input from more than 300 Arizonans—students, educators, business leaders, issue experts, and education and civic leaders—the priorities identified reflect the urgency of the question “What can we do today?” These priorities are as relevant now as they were when they were published and focus on action-oriented steps that we in Arizona can take to strengthen the educator pipeline, expand early learning and student support systems, and boost postsecondary access, enrollment, and completion.

Learn more about [*Prioritizing What Matters Most*](#) and the recommendations supporting these priorities.



How the Lumina Foundation Charts Arizona's Progress

Lumina Foundation, a national leader in postsecondary attainment research, uses methodologies and data sources different from those of the Arizona Education Progress Meter. Despite these important differences, Lumina's "Stronger Nation" report is a valuable complement to the Progress Meter in that it situates analysis of Arizona's attainment rate within a broader national context and enables comparisons among states.

It is important to note that Lumina's analysis portrays Arizona's progress more favorably than the Progress Meter does. According to Lumina's most recently published report, Arizona's overall attainment rate (including associate degrees and above, as well as high-value non-degree credentials) rose 20.8 percentage points from 2009 to 2023, one of the largest improvements in the nation.⁴ By Lumina's 2023 calculations, roughly 56 percent of Arizona's working-age adults held a post-high school credential, up from around 35 percent in 2009 and slightly above the national average (approximately 55 percent). Notably, much of this jump can be attributed to the inclusion of workforce certificates in Lumina's count, according to which 43.2 percent of Arizona adults have an associate degree or higher, and 12.3 percent have a short-term credential (certificate or certification).⁵

Key Distinctions Between Lumina and the Arizona Education Progress Meter

The Arizona Progress Meter defines attainment as the percentage of Arizona residents ages 25–64 who have completed a 2- or 4-year degree or who have an active professional certificate or license. Individuals who have never had post-high-school education, or have attended but earned neither a degree nor a non-degree certificate, are not included.

Credential Inclusion: The Arizona Progress Meter includes professional certificates and licenses but may exclude them at sub-state levels due to data limitations. Lumina's "Stronger Nation" includes a broader range of credentials, such as short-term certificates and industry certifications, and assesses their economic value.

Economic Value Assessment: Lumina evaluates the economic return of credentials, whereas the Arizona Progress Meter focuses on attainment without assessing economic outcomes.

Geographic Detail: The Arizona Progress Meter provides more granular data within the state, while Lumina offers broader national and regional comparisons.

Data Sources: While both utilize American Community Survey data from the U.S. Census Bureau, Lumina incorporates additional national surveys to capture a wider array of credentials and their economic impacts.

Additionally, Lumina has expanded its discussion of attainment to incorporate the idea of credentials of value, defined as "degrees, certificates, and certifications held by the U.S. labor force (25-64 years) that yield an annual salary/wage at least 15 [percent] more than the national median salary/wage for a high school graduate."⁶ By this definition, Lumina calculates that 46 percent of working-age Arizonans have a credential of value; among Arizonans earning at or above the definitional benchmark, 34 percent have a degree and 12 percent have a short-term credential.⁷

⁴ Lumina Foundation, *Stronger Nation: Learning Beyond High School Builds America's Talent Pipeline*, 2023. <https://www.luminafoundation.org/stronger-nation/>

⁵ *Ibid.*

⁶ *Ibid.*

⁷ Lumina Foundation, "Credentials of Value," *Stronger Nation*, 2023. <https://strongernation.luminafoundation.org/credentials-of-value>

How the Arizona Board of Regents Tracks Attainment in Our State

The Arizona Board of Regents (ABOR), one of the state's leading authorities on postsecondary attainment data, publishes its *Postsecondary Attainment Report* annually to track enrollment and completion trends among Arizona public high school graduates. The 2023 report shows that while Arizona made modest gains in postsecondary enrollment—48.3 percent of 2022 graduates enrolled within a year, up from 48.1 percent the prior year—the rate remains below the 52.8 percent pre-pandemic level and well below the national average of 62 percent. Six-year completion rates have been largely flat, with 30.3 percent of the 2017 graduate cohort completing a postsecondary credential, including 23.2 percent earning a bachelor's degree, 2.9 percent an associate degree, and 4.2 percent a certificate or credential.⁸

ABOR also notes the disparities that emerge across racial, ethnic, and socioeconomic lines. Four-year enrollment rates for Black, Hispanic, and Native American graduates declined from 2021 to 2022, even as rates rose for White and Asian peers. Completion gaps remain stark—only eight percent of Native American graduates and 15 percent of Hispanic graduates earned a bachelor's degree within six years, compared to 31 percent of White graduates and 55 percent of Asian graduates. Economically disadvantaged students, English language learners, and students with disabilities also enrolled and completed at significantly lower rates, though there have been small year-over-year improvements for these groups.

ABOR emphasizes that increasing attainment will require closing these gaps and fostering a stronger college-going culture statewide. Action steps include expanding access to and enrollment in Arizona's public universities—which already enroll

more than two-thirds of in-state four-year degree seekers—improving high school preparation for college, and targeting outreach to underrepresented communities.

Examples from Other States: Texas

To incentivize the production of credentials of value and to meet workforce needs, Texas has created new grant programs for colleges to start or expand short-term training programs, with the aim of quickly boosting the number of certified workers in fields like commercial trucking, energy, and IT. In tandem, Texas has been developing a credential registry and data system to better track graduates into the workforce.⁹

On the employer side, Texas has engaged industry through its Tri-Agency Workforce Initiative, which brings together the Texas Higher Education Coordinating Board, Texas Workforce Commission, and Texas Education Agency (K-12) to align policy and share data. This trio has worked on initiatives like career pathways in high school, expanding work-based learning, and promoting skills-based hiring among employers.¹⁰

In 2022, the Texas state government announced it would review state job postings and remove four-year degree requirements for positions where they are not necessary in a push to model skills-based hiring in the public sector.

⁸ Arizona Board of Regents, "2023 Postsecondary Attainment Report," 2023. <https://www.azregents.edu/sites/default/files/reports/2023-Postsecondary-Attainment-Report.pdf>

⁹ Texas 2036, "Education and Workforce - Texas 2036," March 17, 2025. <https://texas2036.org/education-workforce/>

¹⁰ Tri-Agency Workforce Initiative, "Tri-Agency Workforce Initiative," May 21, 2025, <https://triagency.texas.gov/>

Improving Readiness for Success After High School

One of the central challenges facing Arizona as a state, both now and beyond 2030, is ensuring that more young people are actually ready for post-high school education and training opportunities.

Most obviously, improving our high school graduation rate (which sits well below our goal of 90 percent) and improving post-high school enrollment rates (which is currently 49 percent) will be crucial, as these represent key milestones that make education and training after high school possible. The ongoing conversation among educators, policymakers, education champions, and communities often focuses on feasible strategies to strengthen academic preparation and postsecondary readiness, including:

- ▶ **Increasing postsecondary advising and exposure.** Every student should have access to quality guidance on education and career options, but given Arizona’s high student-to-counselor ratio, scaling innovative models is key. Leveraging partnerships, near-peer advising, and technology-based solutions can expand advising capacity. Opportunities like college visits, career fairs, and virtual tools can help students and families explore pathways early and often.
- ▶ **Expanding career awareness in the middle grades.** Research shows that students begin shaping postsecondary aspirations well before high school. Providing structured career exploration in middle school—through classroom activities, job shadows, and exposure to high-demand fields—helps students see the relevance of academics and envision a future that includes education and training beyond high school.

- ▶ **Requiring or strongly incentivizing FAFSA completion.**

Given that financial aid is essential for postsecondary opportunities to be feasible for most students. States that have implemented FAFSA mandates have seen significant upticks in college-going.

- ▶ **Continuing to invest in dual enrollment and early college opportunities.**

Dual enrollment has proven results. Learners who earn college credits in high school are more likely to attend and finish college.¹¹ Arizona’s recent funding to reduce dual enrollment costs is a positive step; scaling that so that every interested student can take at least some college-level courses before graduating high school could substantially boost the pipeline.

- ▶ **Enhancing career and technical education (CTE) in high school.**

Students engage in hands-on learning and earn industry credentials by graduation, keeping them attached to the education system. Expanding career awareness, job shadows, and CTE internships before and during high school help students see a path for themselves in further education and training.

To achieve any of this, Arizona must adequately fund its public schools.

The consequences of underfunding are evident in educational outcomes. Arizona’s high school graduation rate remains below the national average and our state goal, with only 78 percent of students graduating within four years as of 2023 (per the Arizona Education Progress Meter).¹² Furthermore, the number of teachers not fully certified for their teaching assignments has grown significantly in recent years, from 5,072 in 2020–21 to 8,229 in 2023–24 (an increase of more than 60 percent).¹³ These challenges undermine students’ preparedness for postsecondary education and contribute to lower college enrollment and completion rates.

¹¹ Kimberly Morales et al., *Dual Enrollment in Arizona High Schools*, Helios Education Foundation, 2022. <https://www.helios.org/latest/research/dual-enrollment-in-arizona-high-schools/>

¹² Center for the Future of Arizona, “2025 Arizona Education Progress Meter Update,” March 2025. <https://www.arizonafuture.org/news-events/news/2025/03/2025-arizona-education-progress-meter-update/>

¹³ Learning Policy Institute. “2025 Update: Latest National Scan Shows Teacher Shortages Persist,” *Learning Policy Institute Blog*, January 15, 2025. <https://learningpolicyinstitute.org/blog/2025-update-latest-national-scan-shows-teacher-shortages-persist#:~:text=Arizona's%20State%20Superintendent%20of%20Public,especially%20in%20high%2Dneeds%20schools>

Insufficient Higher Education Funding Is a Significant Barrier to Success

Although Arizona’s community colleges and universities represent an essential part of the solution to our state’s workforce development challenges, they are chronically underfunded. Education appropriations (per full-time student, or FTE) in Arizona have decreased 26.9 percent since 1980. In 2024, public institutions in Arizona received \$6,571 in education appropriations per FTE; this amounted to approximately 56 percent of the U.S. average.¹⁴

Insufficient funding for postsecondary education in our state constrains the capacities of all higher education institutions, but especially community colleges which rely much more heavily on state support than four-year institutions (for whom tuition is a significantly larger source of revenue).

This underfunding is particularly evident in rural community college districts, which rely more heavily on state aid due to lower local property tax revenues. This year, the state allocated \$14.0 million in ongoing Rural Aid to support these districts. Still, this aid is not part of the statutory funding and is subject to annual legislative approval.¹⁵

In particular, the funding shortfall has tangible effects on community colleges’ ability to serve students. Colleges may increase tuition and fees or limit program offerings to compensate for reduced state support. These measures can hinder students’ access to education and training, particularly for low-income and non-traditional students who depend on affordable local options.

This is especially relevant in the context of statewide workforce development efforts because community colleges are often the best positioned to provide education and training programs that prepare Arizonans for success in jobs that do not require a college degree, but nonetheless require the type of specific training that a certificate or short-term credential program can provide. They also serve a large proportion of low-income and minority students, opportunity groups that Arizona needs to ensure we support if we hope to meaningfully increase rates of postsecondary participation and success.

More broadly, increasing and stabilizing funding for postsecondary institutions, whether community colleges or universities, is vital to ensuring that Arizona has a postsecondary system that has the capacity to serve individuals and communities throughout the state and to create the programs and initiatives that align with our collective ambitions for attainment and workforce development.



¹⁴ Arizona Joint Legislative Budget Committee, “Community College Funding,” 2024. <https://www.azjlb.com/units/communitycollegefunding.pdf>

¹⁵ State Higher Education Executive Officers Association, “2024 State Higher Education Finance Report,” 2025. <https://sheeo.org/state-profile/arizona/>



Arizona Spotlight: How Statewide Collaborations Can Begin to Advance Attainment

Arizona Attainment Alliance

Launched in 2022, the Arizona Attainment Alliance (A++) represents a pioneering statewide effort to boost postsecondary attainment across Arizona dramatically. Led by Northern Arizona University (NAU), the alliance unites nine community college districts and the Arizona Commerce Authority (ACA), forming a network that serves over 322,000 students through NAU’s statewide campuses and community college partners.

A++ aims to address the state’s persistent college-going and completion gaps, particularly amid a booming economy that demands skilled graduates. A++ is grounded in shared, measurable objectives aligned with Arizona’s Achieve60AZ target, including:

- ▶ **Increasing college-going rates among high school graduates**
- ▶ **Re-engaging adults with “some college, no degree”**
- ▶ **Boosting progression and graduation rates across credential levels**
- ▶ **Elevating the value and relevance of postgraduation credentials.**

To realize these goals, A++ began with a year-long exploratory commission composed of representatives from NAU, community colleges, and the ACA. Together, they are co-creating a roadmap of strategic actions—focusing on enrollment management, K-12 to postsecondary transitions, career-aligned pathways across credential tiers, and shared infrastructure such as joint advising technologies. The ACA’s involvement ensures that academic pathways remain tightly connected to current and emerging workforce demands.

Among the most notable initiatives from A++ is Universal Admissions. Launched in 2023, this initiative ensures that students who don’t initially qualify for NAU admission are seamlessly enrolled at a community college, with guaranteed transfer pathways when ready—removing application barriers and making degree attainment more accessible across the state.

A++ also serves as a collaborative framework for aligned philanthropy and support, as seen in the Arizona College Excellence (ACE) initiative—launched in 2023 through a \$7.6 million combined grant from Helios Education Foundation and The NAU Foundation. ACE specifically targets community colleges serving rural and tribal students, providing scholarships and support to aid transfers and completion at NAU.¹⁶

¹⁶ Lumina Foundation, “The Great Admissions Redesign: Convening Summary,” November 2024. <https://www.luminafoundation.org/wp-content/uploads/2024/11/Great-Admissions-Redesign-Convening-Summary.pdf>



Arizona Learning Mobility Collaborative

Persistent barriers to transfer and credit mobility for Arizona students include fragmented credit systems, inconsistent recognition of prior learning, complex transfer agreements, unclear standards, and limited record interoperability. This leads to lost time, higher costs, and frustration, especially for adult learners or those pursuing micro-credentials. Solutions require policy reforms to establish standard credit practices, streamline transfer pathways, and develop technology infrastructures for credit tracking.

The Arizona Learning Mobility Collaborative is the first state-level initiative of its kind in the nation, uniting Arizona's 13 public higher education institutions, the Arizona Board of Regents, the Arizona Community College Coordinating Council (AC4), and a wide network of nonprofit, industry, and national partners, including AACRAO, Education Design Lab, and Strada Education Foundation. The Collaborative's mission is to build infrastructure and policy that make learning—skills, credentials, and experiences—more visible, transferable, and valuable as learners move between education and work. It serves as a shared platform for assessing strengths, addressing gaps, and aligning statewide stakeholders on policies and practices that eliminate transition barriers and improve learner success at critical points in their educational and career pathways. Established communities of practice within the Collaborative focus on implementing and scaling micro- and milestone credentialing and credit for prior learning.

At the heart of the effort is the Learning Mobility Framework, a flexible, learner-centered blueprint for reimagining educational pathways to be seamless and workforce-aligned. Grounded in AACRAO's definition of "learning mobility," the framework has seven key components:

- 1. Developing Common Principles** – values and guiding principles that align statewide efforts.
- 2. Aligned Governance and Supportive Policies** – state-level policies and institutional practices working in sync.
- 3. Personas** – used to design solutions that meet diverse learner needs.
- 4. Interoperable and Open Standards** – data sharing for credentials and records.
- 5. Institutional Verticals of Work** – skills articulation, microcredentials, credit for prior learning, transfer, and workforce alignment.
- 6. Collaborative Infrastructure for Institutions and Credentials** – integrated systems to track learner progress and reduce credit loss.
- 7. Collaborative Infrastructure for Learner Agency** – learning and Employment Records (LERs) digital wallets, and other tools that give learners control over their data.

The framework is designed to be adaptable, evolving with implementation and stakeholder feedback, and offers a common language and structure for addressing learning mobility challenges. By transforming a historically fragmented system into a connected, learner-first ecosystem, the Collaborative seeks to create scalable models that inspire similar efforts across the country.¹⁷

¹⁷ Education Design Lab, "Learning Mobility - Education Design Lab," September 2, 2025. <https://eddesignlab.org/project/learning-mobility/#:~:text=The%20first%20State%20Collaborative%20for%20Learner%20Mobility%20launched,more%20visible%2C%20and%20transitions%20more%20use.>

Education and Training and Workforce Needs in Arizona Are Linked

Arizona’s workforce is projected to grow significantly by 2033, with notable job increases across various industries. Arizona is also quickly becoming a top hub for semiconductor manufacturing in the United States, supported by large investments, strategic federal backing, and a focused effort on workforce development.

Rapid Growth Highlights Imperative To Meet Workforce Needs

By 2033, it is projected that Arizona will have added 486,348 jobs, increasing total employment in the state to 3,921,138. This represents an annual growth rate of 1.3 percent, which would significantly outpace the projected 0.4 percent national rate.¹⁸

Projected Job Growth by Industry, 2023-2033

Industry Supersector	Annualized Growth Rate	Annual Job Gains
Health Care and Social Assistance	2.6%	13,753
Construction	2.2%	5,142
Manufacturing	1.5%	3,150
Leisure and Hospitality	1.3%	5,391
Professional and Business Services	1.3%	6,294
Trade Transportation and Utilities	1.2%	8,041
Other Services	0.9%	1,309
Self Employed	0.7%	2,170
Financial Activities	0.7%	1,781
Information	0.3%	371
Educational Services	0.3%	811
Government	0.3%	564
Natural Resources and Mining	-0.3%	143

Source: Arizona Office of Economic Opportunity

¹⁸ Arizona Office of Economic Opportunity, “2023–2033 Industry Employment Projections,” 2024. <https://oeo.az.gov/news/2023-2033-industry-employment-projections>

Crucially, occupations in a number of the fastest-growing sectors tend to require postsecondary training. According to the Arizona Office of Economic Opportunity, Health Care and Social Assistance the sector will account for the biggest job gains through 2033 (about 13,753 added per year). This sector, along with Professional and Business Services, include roles like nurses, medical technicians, teachers, software developers, engineers, and other professionals, many of which need associate, bachelor's, or advanced degrees. Other high-growth industries include Construction, Manufacturing, and Leisure and Hospitality.¹⁹

The Semiconductor Manufacturing Sector in Arizona

Importantly, Arizona's semiconductor manufacturing sector is poised for substantial growth through 2030, underpinned by major investments from industry leaders like AMKOR, TSMC, and Intel, robust job creation, and strategic workforce development initiatives. Since 2020, Arizona has attracted over \$205 billion in semiconductor-related capital investments, including manufacturing, research and development, and supply chain infrastructure.²⁰ TSMC's Arizona operations alone are projected to create approximately 6,000 direct manufacturing jobs and 20,000 construction jobs.

Arizona's community colleges and universities are actively expanding programs to meet the growing demand in this sector.²¹

In the Phoenix area, educational institutions have responded quickly: Arizona State University established new microelectronics degree programs and is building a state-of-the-art advanced packaging R&D facility. Similarly, Maricopa Community Colleges has established an intensive "Semiconductor Technician Quick Start" training, a 10-day bootcamp to introduce people to the industry and fill entry-level technician roles.²²

These programs exemplify how the Phoenix region is aligning its education system with emerging workforce needs in real time. They also underscore the regional contrast that defines Arizona; such cutting-edge industry-education partnerships are harder to come by in rural Arizona. With this in mind, the state has prioritized launching a number of workforce accelerators in rural areas.²³

¹⁹ Ibid.

²⁰ Arizona Commerce Authority. "Semiconductor Advantages." n.d.
<https://www.azcommerce.com/industries/manufacturing/semiconductor-advantages/>

²¹ Ibid.

²² Arizona Governor's Office of Strategic Initiatives, "Advanced Manufacturing and Semiconductor Workforce," 2024.
<https://osi.az.gov/priorities/talent-ready-az/advanced-manufacturing-and-semiconductor-workforce>

²³ Arizona Governor's Office of Strategic Initiatives, Op cit.

Mapping Postsecondary Outcomes to Workforce Opportunities

There is no single comprehensive and publicly available dataset that maps credential attainment to real-time industry and employment data specific to Arizona. The [Post-Secondary Employment Outcomes \(PSEO\) program](#), run by the U.S. Census Bureau, is perhaps the closest thing we have. It links student records from participating colleges with national employment databases, allowing examination of graduates' employment rates, wage outcomes, industry of employment, and geographic mobility after earning specific majors and credentials, often at 1-, 5-, and 10-year intervals. However, as of June 2024, PSEO data included graduates from only three institutions in Arizona (participation is voluntary): Arizona State University, Northern Arizona University, and the University of Arizona.

Despite its current limitations, the PSEO program highlights what is achievable for Arizona with respect to public reporting of this kind. We have the chance to strengthen the link between our education and workforce systems by developing and sharing a comprehensive dataset that connects postsecondary credential attainment to real employment opportunities statewide. This resource would enable educators, policymakers, employers, and students to easily identify which degrees, certificates, and licenses lead to high-demand, well-paying jobs in Arizona's key growth sectors, from healthcare to advanced manufacturing. Such transparency would help align academic programs with labor market needs, reduce costly mismatches between graduates' skills and employer requirements, and promote more strategic workforce development that supports individual prosperity and economic growth.

From a research perspective, this kind of cross-sector data collection is the potential inherent in the [Integrated Data System \(IDS\)](#) developed by the Office of Economic Opportunity. The IDS brings together data from agencies and organizations statewide to make them available for approved research on priority topics including K-12 and early education, postsecondary, and workforce. While data are not made public, as it continues to be developed IDS can become a powerful asset for identifying how the state can strengthen its education and workforce development efforts, and for informing strategic efforts to increase attainment.

By publishing current, reliable data on the intersection of education and workforce—and by mapping opportunities for individuals, industries and the state—Arizona could offer students and families a clearer pathway to economic mobility, strengthen employer recruitment and retention, improve regional workforce planning, and establish itself as a national leader in education-workforce alignment. In doing so, the state would show that data transparency and strategic cooperation are vital tools for building a flexible, competitive economy that benefits all Arizonans.

The Geography of Job Growth in Arizona Is a Challenge

Regional disparities with respect to job growth in Arizona reinforce the need for regional strategies. Maricopa County alone is projected to generate about 40,211 new jobs per year through 2033 (1.5 percent annual growth), far outpacing any other county.²⁴ Pima County is a distant second (~3,284 jobs annually), and some rural counties will see only a few hundred new jobs per year. This means the lion's share of workforce demand, and thus the greatest need for educational output, is in the Phoenix area and, to a lesser extent, Tucson. It also means Phoenix will continue to attract talent from other parts of the state (and country), potentially widening regional disparities.

Urban centers have made faster gains and can leverage more resources to boost education outcomes, while rural and tribal areas require tailored strategies and investments (such as broadband expansion for online learning, rural faculty incentives, and mobile training programs) to close the gap. The state's attainment goal of 60 percent will be virtually impossible to reach without lifting up all regions. As Lumina's *Stronger Nation* data and the Arizona Progress Meter show, none of Arizona's 15 counties has reached 60 percent attainment. The most viable opportunities to increase the statewide rate lie in focusing on both "large population areas and regions with lower attainment" simultaneously.²⁵

The challenge for education and business leaders and policymakers is to balance strategies that continue to increase access to education and training after high school in metro Phoenix and Tucson (where small percentage gains in attainment translate to huge numbers of people), while also intensifying support for education and workforce development in rural counties.

Examples from Other States: Ohio

A standout initiative from Ohio is TechCred, a program launched in 2019. TechCred provides funding to employers to help their current or prospective workers earn short-term, technology-focused credentials. The state reimburses companies for the cost of approved training courses (often 6–12 month certificates or industry certifications) in high-demand skill areas. The program has been hugely popular; as of 2024, TechCred has funded over 100,000 tech-focused credentials for Ohioans across nearly 2,000 employers.²⁶ Essentially, it incentivizes employers to invest in their workforce's education. This directly boosts attainment (those certificates count toward Ohio's 65 percent attainment goal) while also meeting immediate workforce needs. In one recent round of funding, 342 companies were approved for funding to train 4,100 workers in skills like IT support, cybersecurity, robotics, and data analytics.

²⁴ Arizona Office of Economic Opportunity, "Arizona 2023-2033 Projected Employment Report: State Projected to Add 486,348 Jobs Over Next 10 Years," October 31, 2024. https://oeo.az.gov/sites/default/files/data/emp/LTIP_emp_proj_report.pdf

²⁵ Lumina Foundation. *A Stronger Nation*.

²⁶ Ohio Development Services Agency, "TechCred," n.d., <https://techcred.ohio.gov/home>.

Reframing Post-High School Education and Training and its Value Proposition

As we look beyond 2030 to the future of our state, education and workforce development strategies must focus on ensuring that all Arizonans, regardless of where they live, have the opportunity to share in the benefits of continued economic growth, increased prosperity statewide, and a higher quality of life. After all, in advocating for greater attainment, these are the outcomes we aim for, both statewide and for individual Arizonans. Education and training after high school enable more Arizonans to earn higher incomes, enjoy expanded opportunities for workforce participation, and achieve upward economic mobility. In turn, Arizona's social fabric becomes stronger, allowing more communities to thrive.

Until now, focusing on postsecondary credential attainment has helped align strategies, policies, and advocacy aimed at improving individual educational outcomes and meeting Arizona's workforce needs. However, this narrow focus can obscure or underemphasize some pathways that learners, whether recent high school graduates or adults, should be able to pursue to acquire the skills employers look for.

Efforts to increase rates of education and training after high school are not just about getting more people to earn college degrees or other credentials. Postsecondary credentials should not just be credentials for the sake of credentials. Instead, it is vital that credentials truly hold value in the labor market to empower workers and employers alike. With this in mind, we can understand "attainment" more broadly. It represents—for individuals, communities, and employers—the extensive range of opportunities and capabilities that education and training after high school unlock.



This broader understanding can be reflected in policy and practice. Iowa, for example, measures its “postsecondary educational readiness level,” which reached 71.8 percent in 2022, as part of how it assesses the efficacy of its post-high school education and training ecosystem. According to the Iowa Workforce Development Office, this figure “includes both the Iowans who received a certificate and those adults who attended training and education programs that they stated helped them acquire skills that have added value to their career path (despite not officially completing a program).”²⁷

In Arizona, as we try to expand access and opportunity and strengthen our workforce, multiple systems-level strategies can be leveraged further to increase attainment in the traditional sense, expand recognition of and support for additional education-training pathways that lead to workforce readiness, and grow the number of available professional pathways for learners.



The H5 Coalition Is Reimagining High School in Arizona

The H5 Coalition is led by the Arizona Institute for Education and the Economy (AIEE) at Northern Arizona University, in partnership with Arizona school districts. Its name, H5, stands for High School, Higher Education, High-Wage, High-Skill, and High-Demand Jobs. Launched in mid-2024, the coalition aims to overhaul how high school is structured by rethinking graduation requirements, course-taking patterns, dual enrollment, internships, early college access, and integrating financial, digital, and AI literacies into the curriculum. The goal is to equip students for diverse postsecondary pathways and better prepare them for future careers.

The coalition is guided by the idea that the education system cannot reform itself independently. The extent of the transformation needed to ensure the outcomes the state seeks is possible only through partnership among business and industry, PK–12 and higher education, philanthropy, community organizations, and government to drive change together.

Nearly 200 organizations from all 15 counties, spanning the entire P-20 continuum, have committed to this redesign initiative, with active support from NAU’s Institute. The coalition aggregates of innovation, bringing together educational leadership to drive systemic reform in high school design across Arizona.

A signature initiative of the AIEE and the coalition is the development and dissemination of [AI guidance for K–12 schools](#), first published in 2024. This guidance provides a practical framework for responsible, effective AI use in classrooms—addressing strategic planning, educator training, policy considerations, and ethical implementation.

Learn more about [AIEE](#) and [the coalition](#).

²⁷ Iowa Workforce Development, “About Future Ready Iowa,” n.d. <https://workforce.iowa.gov/opportunities/future-ready-iowa>.

Bringing More Talent to the Fore Through Skills-Based Hiring

There is growing recognition that “attainment” need not be solely defined by credential or degree programs. The promise of skills-based hiring practices, for example, which evaluate candidates on their competencies and practical training rather than just academic credentials, is that it is a more inclusive way of evaluating workers’ job readiness. By contrast, the reliance on credentials as representative of worker capabilities and readiness, though efficient for the people doing the hiring, is often imprecise and potentially unfair.²⁸ Importantly, skills-based hiring complements efforts to increase attainment and expand our understanding of how education and training after high school can better support learners and employers alike.

For organizations and workers alike, there are clear benefits to the skills-based hiring approach. For employers, hiring based on skills and experience can alleviate talent shortages by tapping a wider pool of candidates, including those who gained expertise through alternative routes like technical training or on-the-job experience.²⁹

Examples from Other States: Colorado

Colorado has been at the forefront of skills-based hiring and credential recognition. The state was an early partner with the [Skillful initiative \(Markle Foundation\)](#), which, starting around 2016, worked with Colorado workforce agencies and employers to promote hiring based on skills rather than degrees. In 2020, Colorado’s Governor issued an executive order to eliminate unnecessary degree requirements in state government job postings, opening up tens of thousands of jobs to people with the right skills (regardless of whether or not they have a degree).³⁰ This was accompanied by investments in upskilling programs so that more Coloradans could obtain the specific skills needed for those roles, often through short courses or community college certification programs. The state’s Department of Labor and Higher Ed also collaborated to build tools that help job seekers translate their skills (from military service, for example) into job qualifications. These efforts align with an evolving concept of attainment; what matters is a person’s competencies, not just the credential itself.

State governments are among the largest employers in any given state, and they are leading the way when it comes to skills-based hiring. Over half have enacted policies to encourage skills-based hiring and eliminate degree requirements for various job postings.³¹ Arizona has already been recognized as one of the states pioneering innovative approaches incorporating skills-based hiring strategies to create more workforce pathways for Arizonans. Initial efforts have focused on a limited set of public sector occupations and ensuring alignment of hiring infrastructure and practices.

²⁸ Annelies Goger, “There’s More to Skills-based Hiring Than Just Removing Degree Requirements.” Brookings, January 7, 2025. <https://www.brookings.edu/articles/theresmore-to-skills-based-hiring-than-just-removing-degreerequirements/>

²⁹ Ibid.

³⁰ National Governors Association, “How Colorado Is Transforming Its Workforce Through Skills-Based Practices,” 2024. https://www.nga.org/wp-content/uploads/2024/11/ColoradoCaseStudy_Nov2024.pdf

³¹ National Governors Association. “Empowering Progress: Harnessing Skills-Based Strategies to Drive Public Sector Excellence,” 2025. <https://www.nga.org/publications/empowering-progress-harnessing-skills-based-strategies-to-drive-public-sector-excellence/>

Public sector efforts like these—and the requisite statewide infrastructure to support it at scale and make it viable for learners and employers alike—has the potential to play a vital role in Arizona’s education and training ecosystem. However, it is crucial to note that foundational changes like skills-based hiring do not automatically take root at the level of practice. In fact, a researchers note that, nationally, “a deeper analysis of actual hiring patterns suggests a wide gap between intent and impact. Simply dropping stated [degree] requirements seldom opens jobs to those who don’t have a college degree.”³² Meaningful change will only come when that gap between intent and impact is narrowed.

Educators, business leaders, and state policymakers all have a responsibility to shape the education-training and workforce ecosystems to the mutual benefit of Arizonans, businesses (current and prospective) in the state, and the state as a whole. Ultimately, this creates what Brookings calls “a multifaceted ecosystem with a broad set of actors implementing skills-first hiring effectively and equitably, including employers, human resources system vendors, credentialing organizations, data standards organizations, learners and earners, policymakers, and more.”³³



Accelerating Attainment Through Competency-Based Education

Competency-Based Education (CBE) is a proven approach to learning that focuses on what students know and can do, rather than how much time they spend in a classroom. Instead of moving through courses on a fixed calendar, learners progress as they demonstrate mastery of clearly defined skills, knowledge, and behaviors. As the Competency-Based Education Network describes, this model leads to more equitable outcomes for those underserved by traditional education and builds stronger bridges between education and careers by emphasizing competencies aligned with workforce needs.³⁴

CBE expands pathways to attainment by allowing students—including working adults and those with prior learning—to earn credentials more flexibly and efficiently. Many states have adopted CBE initiatives that accelerate credential completion and directly support workforce pipelines, such as in the healthcare, IT, and manufacturing sectors.

By embedding CBE in Arizona’s attainment strategy, leaders can help reduce time-to-degree, increase affordability, and produce graduates with demonstrable competencies that employers recognize and value.

³² Annelies Goger, Op. cit.

³³ Ibid.

³⁴ Deborah Bushway et al., *Quality Framework for Competency-Based Education Programs: A User’s Guide*, *Quality Framework for Competency-Based Education Programs: A User’s Guide*, Competency-Based Education Network, 2018. <https://www.cbenetwork.org>.

Realizing the Potential of Short-Term Credentials and Micro-Credentials

Complementary to hiring-side changes, expanding understanding and uptake of alternative credentials represents an important lever for enhancing economic mobility in our communities and building Arizona’s workforce. These include industry certifications (such as CompTIA or AWS certifications in IT), certificate programs (often at community or technical colleges), micro-credentials and digital badges (competency-based recognitions of learning), and applied learning certificates from companies (e.g., Google Career Certificates).

Consistent with the Lumina Foundation’s conception of “credentials of value,”³⁵ if such short-term credentials meet quality criteria and enable workers to earn more than a high school graduate typically would without an additional credential or academic degree, then they expand the opportunities and types of opportunities for Arizonans to become workforce-ready after high school.

Short-term credentials are also integrated into longer programs or made “stackable” toward a degree. For example, an IT support certificate might count toward an IT associate degree, which could subsequently lead to a bachelor’s degree. This stackability helps students accumulate recognized credentials and skills while also providing professional pathways that do not exclude academic opportunities.

With clear pathways in place, it can also help connect the worlds of “non-credit” workforce training, prior learning, and more traditional academic programs. Recognition of prior learning awards credit for skills and knowledge someone already has. For postsecondary institutions, this may mean granting credit for prior learning through exams, portfolios, or certifications that substitute for course credit. This can help adult learners finish degrees more quickly and validate their experience and skills, even if developed informally. For employers, recognizing prior learning might involve hiring someone with an unconventional background and then training them to fill gaps, rather than only hiring those with traditional credentials.

Overall, the advantage of stackable, short-term credentials is that they can respond more quickly to changing skills needs and are more accessible for adults who cannot commit to a multi-year degree. However, not all credentials are the same. The quality and value of credentials are key factors; the essential measure is whether a credential leads to higher earnings and greater economic mobility.

In Arizona, initiatives have sprung up to expand the range of professional pathways. For example, community colleges have introduced rapid training programs in areas from cybersecurity to commercial driving. Future48 Workforce Accelerators are designed to quickly certify workers for in-demand jobs; for example, the accelerator launched at GateWay Community College, focuses on semiconductor manufacturing.³⁶ Arizona universities are also offering more non-degree credentials; ASU’s continuing education and online learning includes certificate programs in tech, business, and healthcare that can be completed in less than a year.

While these and other initiatives offer powerful examples of diversifying post-high school education and training, we need much more. In the coming years, it will be essential for education institutions, business and industry, and the state to continue collaborating to expand access to professional pathways for learners and, in turn, strengthen our talent pool for current and prospective employers.

³⁵ Again, the Lumina threshold is an “annual salary/wage at least 15% more than the national median salary/wage for a high school graduate.”

³⁶ Office of the Governor of Arizona. “Governor Hobbs Announces Launch of Semiconductor-Focused Future48 Workforce Accelerator,” November 2024. <https://azgovernor.gov/office-arizona-governor/news/2024/11/governor-hobbs-announceslaunch-semiconductor-focused-future48>

Conclusion: Balancing Short-Term and Long-Term Perspectives and Strategies

Strengthening Arizona’s education and workforce development systems in tandem is a long game that requires sustained commitment and investment. It means taking seriously the imperative to fund education systems from early learning to adult education, upskilling, and retraining. A strong, well-funded education system will be vital to Arizona’s future. At the same time, to ensure that Arizona is building the workforce we need, it is essential that we look beyond the traditional understanding of attainment to cultivate a broader ecosystem of education and training after high school in which students have a clear view of the pathways available to them and financial aid support that enables them to pursue the option, whether a traditional 4-year degree or workforce training, that best suits their needs and aspirations. This will require industries and employers to accelerate their adoption of skills-based hiring practices. It will require new infrastructure for documenting and tracking training and skills development, such as through portfolios of skills and credentials that employers can easily use and trust.

Investing in the data systems, platforms, and tools at the state level that enable this approach—ones that students, educators, and employers alike can use and trust easily—will be essential. Resources like the Arizona postsecondary readiness tool that is currently under development for a pilot phase are representative of the kind of future-oriented innovation Arizona can benefit from. Similarly, there is an opportunity to reimagine and revise the Arizona Education Progress Meter to reflect an expansive view of attainment. Doing so would be a powerful signal that our state is committed to moving beyond our current paradigm by measuring and tracking what we know already matters and what will matter even more in the years to come. It will also require a concerted effort throughout the state to help more adults become learners once again and complete their high school education, or equivalent, and, potentially, further education and training that empowers them with the training and skills employers seek. Likewise, prioritizing programs and infrastructure that support reskilling and upskilling for adults can help to ensure more Arizonans are prepared for rapidly changing workforce needs in the era of AI. Additionally, continuing to build on the inspiring collaborative efforts already underway to strengthen education in our state and forge stronger connections between education and workforce systems will enable us to build on the momentum that the Achieve60AZ goal has helped generate and carry it into the future.

To this end, there is a real need in Arizona to think and act with short and long-term perspectives in mind. We cannot continue along the same path we’ve been following and expect to see different results. Our state’s rapid economic growth and high-tech transformation are creating workforce demands that require immediate action and new, rapidly scalable education models that enable Arizonans to access the opportunities our new economic reality presents. At the same time, we need to address the challenges and barriers—such as geographic disparities, funding shortfalls, and an education system weakened by years of neglect by the legislature—that inhibit the development of a stronger education and training ecosystem in Arizona.

Policymakers, education leaders, and business leaders must all recognize that building the talent pipeline is a long game and that short-term expediencies will not be sufficient. Achieving the state’s goals will require continuing to broker relationships and coordination between education and industry, ensuring every Arizonan is included in the journey, and focusing on the outcomes we all want to see: growth, good jobs, economic mobility, and a thriving Arizona and Arizonans for decades to come.

Priorities for Strengthening Education to Workforce Pathways

1. Improve readiness for success after high school (K–12 funding, advising capacity, early career awareness, work-based learning)
2. Increase postsecondary access, enrollment, completion, and affordability (dual enrollment, FAFSA, financial aid)
3. Modernize education-to-workforce alignment (robust data systems linking credentials to jobs)
4. Elevate short-term credentials, competency-based education, and skills-based hiring (stackable pathways + employer adoption)
5. Close equity gaps across regions and demographics (targeted strategies for rural, tribal, and underserved communities)

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