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6

Prioritizing Access and Opportunity: **How Community Colleges Contribute to Increased Attainment and Economic Growth in Arizona**



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About College Success Arizona

College Success Arizona is working to significantly increase the postsecondary attainment rate of students in Arizona, particularly for those who otherwise would not be able to attend or graduate. By doing so, we believe that we will improve the quality of life not just for those individuals and their families but also for the state as a whole.

Acknowledgments

Dr. Richard Daniel directs College Success Arizona's research and policy activities. He is the lead author of this brief and College Success Arizona's ongoing series of publications on issues that affect college access and attainment.

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Without community colleges, Arizona's higher education system would be a shadow of itself. The state's community colleges are not likely to disappear any time soon, of course, but too often their importance to the state—with respect to economic growth, workforce competitiveness, and economic mobility for students and families—is rendered invisible.

This may be because community colleges are frequently regarded, pejoratively, as a lesser alternative to four-year colleges and universities rather than as the vital higher education institutions, both for individual Arizonans and the state as a whole, that they truly are. Community colleges provide broad access to educational opportunity—especially for students from groups who are underrepresented in higher education, such as racial and ethnic minorities and students from low-income families—that is fundamental to increasing Arizona's attainment rate. Community colleges in Arizona enrolled 53 percent more students than four-year institutions did in 2017.

In 2017, community college students accounted for 41 percent of all undergraduates enrolled at higher education institutions in the United States.

Policymakers and the public are often quick to criticize the performance of community colleges without taking into context the enormous scope of what they do. Community colleges are complex institutions. They play a challenging, multifaceted role in the higher education ecosystem. At the same time that they are asked to provide an accessible, affordable college education to any student who wishes to enroll, community colleges are also charged with accomplishing a litany of other goals including adult basic education and retraining, developmental education, supporting regional economies through workforce development, and preparing students to transfer successfully to four-year institutions.

This is a lot to ask of the community college sector and the complexity of the challenge is made all the more difficult by persistent underfunding and disinvestment by the state. Nowhere is this disinvestment more evident than in the cases of the Maricopa and Pima community college districts, the two largest in the state in terms of enrollment. Both districts were completely defunded by the state in 2015 after years of steady cuts to their support. Despite funding earmarks in the state budget for 2019-20 to support specific workforce development programs at Maricopa and Pima, both districts are far from where they once were with regard to the resources available to them (in 2008, for example, Maricopa Community Colleges received \$69 million in state support).

If Arizona is to prosper in the near future, and enjoy robust, equitable economic growth in the long-term, then community colleges must be supported and leveraged in ways that are commensurate with the vital functions they perform in our higher education system.

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Community Colleges Are Critical To Increasing Attainment

"As an affordable, accessible, learning- and skills-centered option, especially for non-traditional students, community colleges deserve much more support, funding, and respect than they currently receive."

-Steven Mintz, Professor, University of Texas at Austin¹

Community colleges are fundamental to the American higher education system. That system, and society more broadly, rely on community colleges to perform functions that are vital to the health of communities, economies, and the prospects of individuals and families. Although they are often unheralded, and frequently demeaned, community colleges are responsible for workforce development, technical and vocational training, local and regional economic development, and for serving as a springboard to four-year higher education institutions. Their local and regional importance is so great that almost every county in the United States has at least one community college campus.²

**Community colleges in Arizona awarded
42,562 degrees and certificates in 2017,
a 22 percent increase since 2011.³**

In many ways, community colleges perform a complementary function to that of four-year institutions. Whereas admission to four-year institutions is typically selective, at least to a certain degree, most community colleges maintain an open admissions policy as a means of expanding access to higher education for students from diverse backgrounds, with a range of educational goals, and with varying levels of academic preparedness. Similarly, while even the most "affordable" four-year institutions are often out of financial reach for many (even with significant financial aid), community colleges are relatively low-cost alternatives that provide students with effective training and valuable learning experiences that prepare them for a successful future.



What Are Community Colleges?

Community colleges are public higher education institutions that primarily award associate degrees (some award a limited number of bachelor's degrees) and professional certificates. Nearly all community colleges have open admissions policies that permit students to enroll without academic preparation or achievement factoring into admissions decisions. The main goals of most community colleges are to either prepare students for specific labor market opportunities or to transfer to a four-year college or university.

In 2017, community college students accounted for 41 percent of all undergraduates enrolled at U.S. higher education institutions.⁴ Beyond enrolling a substantial overall percentage of undergraduate students, community colleges enroll large numbers of students from many underrepresented groups. In fact, "community colleges enroll higher percentages of female, first-generation..., low-income, and minority students than any other sector of nonprofit higher education."⁵

Percentage of U.S. Undergraduates Enrolled in Community Colleges, by Race/Ethnicity (Fall 2017)



Source: American Association of Community Colleges⁶

Because they provide opportunities to students from groups traditionally underrepresented in higher education, community colleges are instrumental to national and regional efforts to expand access to higher education. As the Urban Institute argues, "by virtue of their nature and reach, community colleges...are indispensable to meeting national goals for educational attainment as well as for the development of a productive workforce."⁷

In this respect, community colleges contribute to greater equity when it comes to access to higher education opportunities. In Arizona, the access to educational opportunity that community colleges provide to Latino students is especially noteworthy given that Latinos represent the fastest growing population group in Arizona and the greatest percentage of students in Arizona's K-12 school system.⁸ Of the 16 college and university systems and campuses in Arizona that are considered Hispanic Serving Institutions (non-profit, degree-granting institutions with full-time equivalent undergraduate Hispanic student enrollment of at least 25%), 11 are either community college locations or community college systems.⁹ Increasing Latino enrollment and success in higher education will be critical to Arizona's aspirations to boost college attainment rates statewide.



Challenges Facing Community Colleges

Despite the tremendous promise inherent in the community college model, and the shared mission to provide accessible and relatively low-cost higher education opportunities, many community colleges throughout the United States struggle to achieve the outcomes they aspire to. Community college enrollments nationwide have declined since their peak in 2010, and only 38 percent of community college students complete a degree or certificate within six years.¹⁰ Furthermore, of the approximately 81 percent of students entering community college who say they intend to “transfer and receive a four-year degree, only 15 percent do so after six years.”¹¹ This low rate of transfer to four-year institutions is a longstanding challenge for community colleges, and one that it is essential for the sector to overcome if it is to truly enable more students to accomplish their educational goals. This is because despite the low number of students in Arizona who transfer, the success rate of those who do is significant. More than 78 percent of new transfer students who enter four-year institutions with an associate degree graduate within six years.¹²

The need to improve transfer rates from community colleges to four-year institutions is a challenge shared by the entire education system. Ensuring K-12 students are college-ready, providing clearer pathways at the community college level, and increased support and guidance from four-year institutions are all necessary to enabling more students to transfer successfully.

Although community colleges have been widely criticized for their failure to ensure that more students achieve beneficial outcomes, it is important to consider community college performance in context. Because most have open admission policies and serve almost all students who wish to enroll, community colleges must use their limited resources to meet a wide range of student needs and accommodate widely varying levels of academic readiness that is a legacy of the underperforming K-12 education system. Community colleges often struggle to provide enough structure and effective guidance to enable students to progress efficiently and graduate with a credential. Other notable challenges include:¹³

- ▶ **Enrollments that fluctuate sharply based on prevailing economic conditions**
- ▶ **The need to keep costs and tuition and fees low**
- ▶ **Competition from other providers of training and credentials**
- ▶ **Increased accountability pressure (in terms of graduation and transfer rates, licensure pass rates, and work performance following program completion)**

But, according to a recent report from The Century Foundation, when considering inefficiencies of community colleges, “the lion’s share of the blame lies with policymakers who systematically shortchange community colleges financially, giving two-year institutions the fewest resources to educate those students who tend to have the greatest needs.”¹⁴ This is particularly noteworthy when it comes to workforce education; an analysis by the Urban Institute notes that “decreases in government funding since the Great Recession and state financing structures that discourage providing more expensive career and technical programs of study exacerbate community colleges’ challenges to sustain and scale workforce education and training.”¹⁵



It is clear that community colleges must do better if they are to make greater contributions to increased attainment rates and stronger state workforces. But, if they are to shoulder the expectations of enabling increased economic mobility and “bridging America’s yawning blue-collar-skills gap,” then community colleges should be provided the resources they need to meet this exceptional and worthy goal.¹⁶

In 2015, after steadily cutting funding levels for years, Arizona eliminated state support for Maricopa and Pima community college districts, the two largest in the state.

Community Colleges Open the Door to Higher Education in Arizona

Arizona is home to 10 community college districts, with 61 locations throughout the state. Combined, they enrolled 294,813 students, either full-time or part-time, in 2017.¹⁷ This total dwarfs the number of students enrolled at public four-year institutions. Arizona’s public universities—Arizona State University, Northern Arizona University, and the University of Arizona—enrolled 171,791 students, nearly 53 percent fewer than the state’s community colleges.¹⁸ Notably, community colleges in Arizona enrolled 32 percent of recent high school graduates in 2017, exceeding the national average by eight percentage points.¹⁹

Community College Districts in Arizona

District	2017 Undergraduate Enrollment
Arizona Western College	11,653
Central Arizona College	9,741
Cochise County Community College District	11,630
Coconino Community College	5,461
Eastern Arizona College	8,291
Maricopa Community Colleges	191,073
Mohave Community College	5,685
Northland Pioneer College	6,098
Pima Community College	34,308
Yavapai College	10,000

Source: National Center for Education Statistics



Additionally, community colleges in Arizona serve a large percentage of students from groups traditionally underrepresented in higher education, including racial and ethnic minority students, low-income students, and students from rural areas. In 2017, for example, 43 percent of students enrolled in Arizona community colleges were from underserved minority groups and 29 percent of enrolled students were Pell Grant recipients (an indication that they come from low-income families).²⁰

By enabling more students from diverse backgrounds to enroll in higher education programs, community colleges make an important contribution to increasing attainment in Arizona. The state has the opportunity to expand this contribution by finding ways to encourage more students to enroll in community colleges (as well as four-year institutions). Such efforts are vital if Arizona expects to reach a 60 percent attainment rate, the statewide goal adopted by the Achieve60AZ alliance. Achieving this goal will require more than one million more Arizonans to earn a college certificate or degree by 2030.²¹

In 2017, Arizona community colleges enrolled nearly one-third of recent high school graduates and 53 percent more undergraduate students, overall, than the four-year universities in the state.

Notably, the increase in attainment that Arizona needs cannot be accomplished just by focusing on student success and ensuring that students who enroll at higher education institutions complete their program of study. While student success is important, of course, and a priority in the state, statewide attainment increases at the scale Arizona seeks to achieve requires more students to enroll in college. Researchers have shown that even with higher student success rates, “substantial increases in postsecondary enrollment” are necessary to achieve attainment goals.²²

Expanding the opportunity to enroll in higher education to more students is critical to Arizona’s success. Community colleges in Arizona, as a sector, can enroll more undergraduate students, overall, than the four-year institutions in the state, especially students from underrepresented groups. As a result, community colleges must be considered essential to efforts to increase attainment statewide and supported accordingly.



Community Colleges Strengthen Arizona's Workforce

Given the high percentage of college students in Arizona who attend community colleges, the impact that these institutions have on the state's workforce is significant. Community colleges enable young people and adults alike to access educational and training opportunities that prepare them for employment in Arizona's increasingly competitive and advanced economy.

Someone who has an associate degree can expect to earn nearly 17 percent more on a weekly basis than someone whose highest education credential is a high school diploma.

Without community colleges and the opportunities they provide—especially training in high-demand fields that may not require a bachelor's degree, but do require a college certificate or associate degree—employers in Arizona would struggle to find the skilled workers they need and fewer Arizonans would benefit from the competitiveness in the labor market and economic mobility that accompany a college education.

The value of college attainment for individuals is abundantly clear. Workforce data consistently demonstrate that individuals who have at least some college education are more likely to be employed and more likely to have higher earnings than less-educated individuals. Someone who holds an associate degree can expect to earn upwards of seven percent more every week than someone who has some college education but no degree. That same person who has an associate degree can expect to earn nearly 17 percent more on a weekly basis than someone whose highest education credential is a high school diploma.

What is more, the labor market advantage that an associate degree provides, in terms of earnings, "is projected to grow as automation transforms the U.S. workforce, making higher-level science, technology, engineering and math skills critical in fields that once required little more than manual dexterity."²⁴

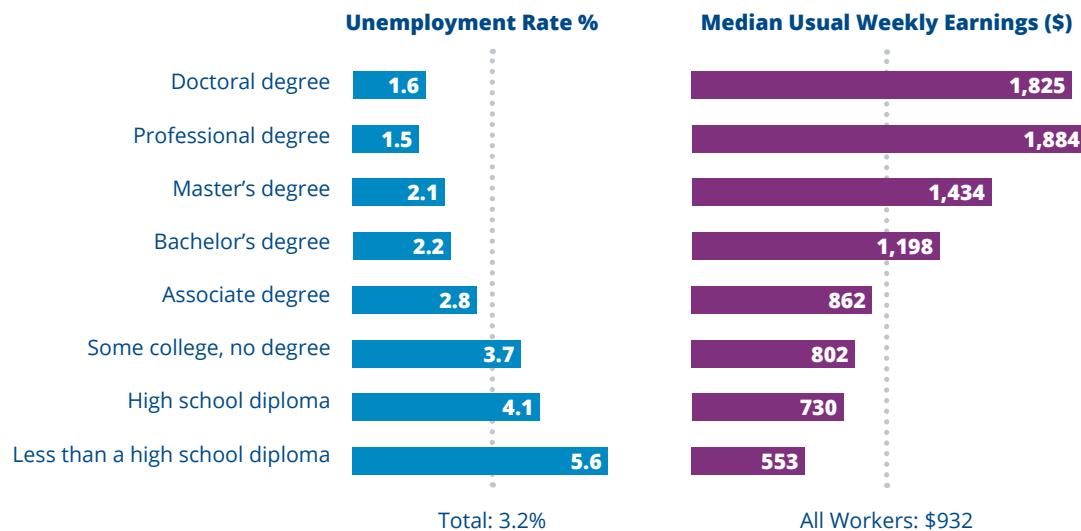
Simply put, the economic opportunities available to individuals with associate degrees, now and in the near future, are far greater than those available to individuals with less education.

"For seventy years, policymakers have viewed public community colleges as a critical driver of upward mobility in the United States."

– The Century Foundation²³



Unemployment Rates and Earnings by Educational Attainment, 2018



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.

Source: U.S. Bureau of Labor Statistics, Current Population Survey.²⁵

In Arizona, there is a significant advantage conferred to workers who hold an associate degree. As College Success Arizona has previously noted, workers in Arizona who hold an associate degree are more likely than those whose highest credential is a high school diploma to have a “good job”—defined as a job that pays at least \$35,000 a year for workers under 45, and at least \$45,000 a year for workers 45 and older—and higher median earnings.²⁶ In this respect, community colleges, thanks to the accessible education and training they provide, are engines of increased economic opportunity for hundreds of thousands of Arizonans.

The Value of Guided Pathways

Guided pathways are among the most promising approaches that community colleges can use to prepare students for success. Rather than an a fluid, free-choice model that allows students to choose from a multitude of course and program options, guided pathways present “courses in the context of highly structured, educationally coherent program maps” and give students the advising and support they need to graduate from their program.²⁷ According to the Community College Research Center, “the idea behind guided pathways is straightforward. College students are more likely to complete a degree in a timely fashion if they choose a program and develop an academic plan early on, have a clear road map of the courses they need to take to complete a credential, and receive guidance and support to help them stay on plan.”²⁸ As such, guided pathways can contribute to more effective community workforce development programs, as well as to overall student success.



The Effect of Educational Attainment for Arizona Workers, Diploma vs. Associate Degree

Educational Attainment	Number of Workers	Percentage of Workers with Good Jobs*	Median Earnings	Median Earnings for Workers with Good Jobs
High school graduate	512,000	31%	\$28,000	\$53,000
Associate degree	232,000	50%	\$37,000	\$59,000
All workers	2,337,000	47%	\$36,000	\$61,000

Source: Georgetown Center on Education and the Workforce²⁹

The contribution that community colleges make to strengthening Arizona's workforce and expanding economic opportunity to state residents extends to the relevance of the certificate and degree programs they offer. That is, community colleges in Arizona collectively offer programs and training for each of the "25 highest-demand occupations in the state. For many of the fastest-growing sectors of the workforce, (e.g., nurses, computer support specialists, EMTs and paramedics, medical assistants, and preschool teachers), nearly every community college district in the state offers a program."³⁰

25 Highest-Demand Occupations in Arizona That Require More Than a High School Diploma but Less Than a Bachelor's Degree

- ▶ Registered Nurses
- ▶ Computer User Support Specialists
- ▶ Medical Records and Health Information Technicians
- ▶ Emergency Medical Technicians and Paramedics
- ▶ Dental Assistants
- ▶ Radiologic Technologists
- ▶ Nursing Assistants
- ▶ Medical Assistants
- ▶ Computer Network Support Specialists
- ▶ Paralegals and Legal Assistants
- ▶ Respiratory Therapists
- ▶ Telecommunications Equipment Installers and Repairers, Except Line Installers
- ▶ Teacher Assistants
- ▶ Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- ▶ Licensed Practical and Licensed Vocational Nurses
- ▶ First-Line Supervisors of Production and Operating Workers
- ▶ Veterinary Technologists and Technicians
- ▶ Phlebotomists
- ▶ Heavy and Tractor-Trailer Truck Drivers
- ▶ Preschool Teachers, Except Special Education
- ▶ Massage Therapists
- ▶ Hairdressers, Hairstylists, and Cosmetologists
- ▶ Medical and Clinical Laboratory Technicians
- ▶ Surgical Technologists
- ▶ Web Developers

Source: Arizona Community Colleges³¹



The important role that community colleges play in strengthening Arizona's workforce is evident in the state's recent decision to selectively fund workforce development programs at Maricopa and Pima community colleges. Specifically, this funding includes:³²

- ▶ **\$4.8 million to Maricopa and \$1.2 million to Pima for workforce development and STEM formula funding (over three years)**
- ▶ **\$5.8 million to Maricopa to expand its health care specialty program**
- ▶ **\$15 million to Pima for an aviation program**

While this re-investment in the two largest community college districts in the state represents an important step, both districts are still contending with a substantial net loss of state funding since 2008, when Maricopa received \$69 million from the state.³³ In 2015, Arizona eliminated state support for Maricopa and Pima community college districts after steadily cutting funding levels since the Great Recession.

This disinvestment happened despite the excellent return on investment that community colleges provide. An impact study by Maricopa Community Colleges showed that for every taxpayer dollar spent funding the district (2013-14), the return was \$4 in the form of added taxes and public sector savings.³⁴

Community Colleges Support Adult Learners

Increased educational attainment is valuable for all Arizonans, not just students pursuing a college certificate or degree. Further education, whether it takes the form of basic education courses or courses that enable adult learners to earn a high school equivalency (often referred to as a GED), can help to open doors to other educational opportunities and improve economic prospects.

Community colleges are essential institutions in this respect. They provide programs and educational opportunities for adult learners that would be scarce otherwise. In 2017, nearly 18,700 Arizonans enrolled in Adult Basic Education (ABE) or General Education Development (GED) courses at Arizona community colleges.³⁵

The importance of these opportunities should not go overlooked. As the national and state economies become increasingly competitive and as a college credential becomes more and more essential for workers seeking jobs that pay family-sustaining wages, "strong ABE programs are critical for the economic success of a growing number of students."³⁶ Adults who do not have a high school degree or a college credential are "likely to feel squeezed by the educational demands of the new economy. Ensuring that they have adequate preparation for college, something that ABE can and should provide, is critical."³⁷



The Impact of Community Colleges in Arizona

Number of Students Enrolled

294,813

Community College-Going Rate
(for Recent High School Graduates)

32%

Transfers to Arizona Public Universities

10,853

Percentage of Enrolled Students from Underserved Minority Groups

43%

Number of Dual Credit Learners Enrolled

25,216

Occupational Learners Earning Industry-Recognized Credentials

43%

Percentage of Enrolled Students Who Are Pell Grant Recipients

29%

Number of Districts

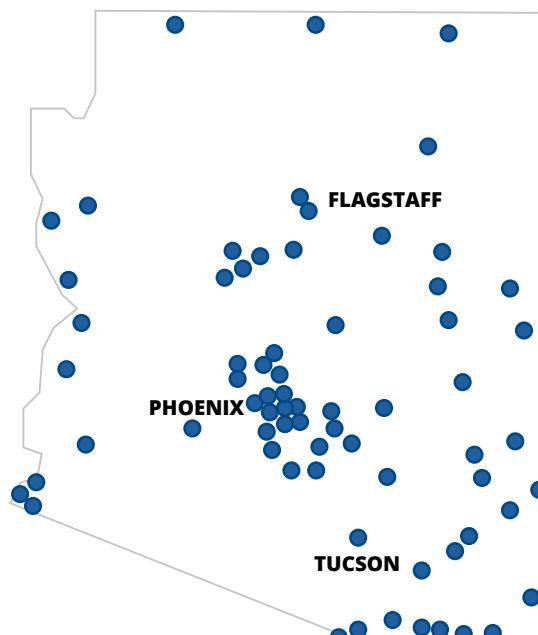
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Degrees and Certificates Awarded

42,562

Number of Locations

61





Community Colleges Provide Higher Education Opportunities in Rural Arizona

Students in rural Arizona communities frequently face educational inequities, with respect to both the K-12 and the higher education systems, that disadvantage them compared to their peers from urban and suburban areas. Educational and economic opportunities have become more and more concentrated around urban and suburban centers in Arizona, and across the country.

College Success Arizona has previously argued that the state should do more to encourage college-going and increase college attainment in rural Arizona. Rural students—many of whom are Latino, from low-income families, or would be the first in their families to go to college—are often challenged to overcome numerous barriers to enrolling in and completing a college certificate or degree program.

"Open admission policies and relatively low tuition prices open the door to many students who would otherwise not be able to continue their educations beyond high school."

– David Baime and Sandy Baum, Urban Institute³⁹

In rural areas, community colleges play a vital role in providing educational opportunities beyond high school. The fact is, rural students are more likely to attend community colleges than other types of higher education institutions. This pattern is largely predicated on institutional proximity; community colleges are often the only higher education institutions in rural areas and, as such, the only options that rural students see as viable.⁴⁰ Additionally, thanks to "familial obligations and strong community ties," rural students often prefer local community colleges within commuting distance to institutions that are farther away from home.⁴¹

When it comes to four-year colleges and universities, rural students are less likely to attend highly selective institutions or those that conduct research and award graduate degrees.⁴² Without community colleges, and the opportunities they provide, college-going in rural communities would likely decrease even further and, with it, the likelihood that Arizona will reach its attainment goals.



Community Colleges Help Bridge the Gap Between High School and Higher Education

Community colleges play an important role in enabling students to earn college credits while they are still in high school, an educational strategy that can save them time and money, and help them become better prepared for college or the workforce by the time they graduate.

Typically, these arrangements take the form of either dual enrollment or dual credit courses. In dual enrollment scenarios, students take courses concurrently at their high school and their local community college. Dual credit differs in that students complete a single course but are eligible to receive credit for that course at both their high school and the partnering community college.

Enabling high school students to take advanced courses and earn college credit can reduce the time and investment required to earn a certificate or degree.

An analysis of federal education data by the American Association of Community Colleges (AACC) estimates that 11 percent of all students enrolled in community colleges were high school students who were in dual enrollment courses or programs.⁴³ Those same estimates—which use part-time enrollment of students under age 18 as a proxy for dual enrollment because the federal government does not collect specific data on dual enrollment—indicate that between 10 and 15 percent of students enrolled in Arizona community colleges in 2017 were high school students dually enrolled.⁴⁴

Expanding access to dual enrollment and dual credit programs is an important way that community colleges can facilitate attainment increases. Enabling high school students to take advanced courses and earn college credit can reduce the time and investment required to earn a certificate or degree that gives them an advantage in Arizona's labor market. Dual enrollment, in particular, can also show students who may not have been considering college options after high school that there is a place for them in higher education. However, state statutes that restrict certain high school students from participating in dual enrollment limit its actual overall impact. Successful initiatives in other states—as well as successful programs in Arizona—serve as important models for any future efforts to expand dual enrollment and dual credit statewide.



Conclusion

Without greater state support for community colleges, Arizona will not reach its attainment goals. As a state, the longer we continue to treat community colleges as subordinate institutions and force them to make do without substantial, sustainable funding and support, the more we risk missing out on the economic growth that accompanies increased attainment.

Numerous organizations and institutions statewide have committed to achieving a 60 percent attainment rate because they recognize that attainment drives economic growth, enhances workforce competitiveness, and improves economic mobility for students and families. This is a signal of the importance of attainment in our state. In this light, we can see disinvestment from community colleges as not just harmful to the future of the state, but as contrary to the will of its people, communities, and industries.

It is clear that Arizona's future will be shaped by our collective efforts as a state to ensure that all residents have equitable access to life-changing higher education opportunities and the economic mobility they bring. Community colleges will play a central role in these efforts. Accordingly, Arizona must better leverage the tremendous potential and promise that community colleges embody. As vital as they are to increasing attainment and providing opportunities to students who would otherwise struggle to access higher education, community colleges need the resources and systematic support to fulfill their important mission.



Policy Recommendations

Ensuring that all Arizonans can access educational programs and institutions that can help them become better equipped for Arizona's labor market or pursue additional higher education should be a key priority for the state. Community colleges are central to this endeavor and without their contributions, Arizona's higher education system will never achieve the statewide goal of a 60 percent attainment rate by 2030. Policymakers have the opportunity to expand equitable access to higher education and increase attainment statewide by providing greater support for community colleges throughout Arizona.

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- 1. Arizona can restore full funding for Maricopa and Pima community colleges.** As the two largest community college systems in Arizona, Maricopa and Pima combined served more than 225,000 students in 2017. However, despite recent budget allocations for specific workforce development programs, the state has persisted in its broad disinvestment from Maricopa and Pima community colleges, forcing them to cut back on programs and services that could otherwise contribute to increasing educational opportunity and attainment in Arizona.
 - 2. Arizona can expand access to dual enrollment and dual credit opportunities for more high school students in the state by revising statutes that limit eligibility.** Currently, community colleges can, at their discretion, allow that students who are not juniors or seniors in high school make up no more than 25 percent of all students enrolled in that course. Enabling community colleges to determine, without limit, which high school students they will permit to participate in dual enrollment will increase access to opportunities that can reduce the time and financial investment needed to complete a college certificate or degree program.
 - 3. Arizona can implement and support policies and programs designed to help community college students better navigate the community college-to-four-year institution transfer process.** Ensuring that more students have access to structured guidance and intentional supports that follow them through the transfer process is essential to enabling them to make the transition successfully. Without such guidance and support programs in place and sustainably resourced, community colleges will likely continue to see low transfer rates relative to students' stated intentions.
 - 4. The state can maintain funding equalization and continue to expand support for community colleges in rural areas.** State funding is vital to the sustainability of rural community colleges, which are often the only visible college options in rural areas. For many rural students, community colleges are the main postsecondary option to either earn a credential or take courses that potentially enable them to transfer to a four-year institution.



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