

Closing the Gap 2020: A Master Plan for Arkansas Higher Education

Executive Summary

Objective

This five year planning cycle is a critical component in the long-term objective to reach the 2025 goal of a 60% post-secondary attainment rate in Arkansas, increasing from the current estimate of 43.4%. By 2020, we will reduce the educational attainment gap in Arkansas by increasing the number of postsecondary credentials by 50% over 2013-2014 academic year levels.

	<u>Credentials Awarded</u> <u>2013-14 Academic Year</u>	<u>% Increase</u>	<u>Credentials Awarded</u> <u>2019-20 Academic Year</u>
Career & Technical			
Certificates	10,472	83%	19,200
Associates Degrees	8,685	46%	12,700
Bachelor's Degrees	<u>15,277</u>	30%	<u>19,900</u>
	34,434	50%	51,800

Supporting Goals

GOAL 1: Raise completion and graduation rates of colleges and universities by 10%.

- Reduce the percentage of students needing remediation to prepare them for college-level course work.
- Reduce the time needed for students to complete remedial requirements.
- Raise first year retention rates of students to SREB regional averages.

GOAL 2: By fall 2018, increase the enrollment of adult students, age 25 to 54, by 75%.

- Reduce the remedial course enrollments for adults by 50% through alternative means of preparing adults for college-level work
- Improve communication of the value of higher education to non-traditional students

GOAL 3: Raise the attainment rates of underserved student groups in the state by 10%.

- Raise the overall college-going rate for all student groups by 5% from 50.1% to 55.1%
- Raise the underserved student college-going rate to equal that of other students
- Raise completion rates of underserved student groups equal to other students.

GOAL 4: Improve College Affordability through Effective Resource Allocation

- Reduced time to degree for students
- Allocate 25% of state scholarship funds to need-based programs
- Re-allocate institutional spending to maximize efficiency and effectiveness

Implementation Plans

Best Practices Consortia

The objective of these consortia is to share ideas across institutions about successful programs that can be implemented on a broader scale and to generate innovative strategies which respond to the goals and objectives of the plan.

Institutional Funding Formulas

An outcomes-based funding model through which institutions would receive continued funding based on achievement of specific outcomes metrics which align with the plan and incentive funding when benchmarks are exceeded.

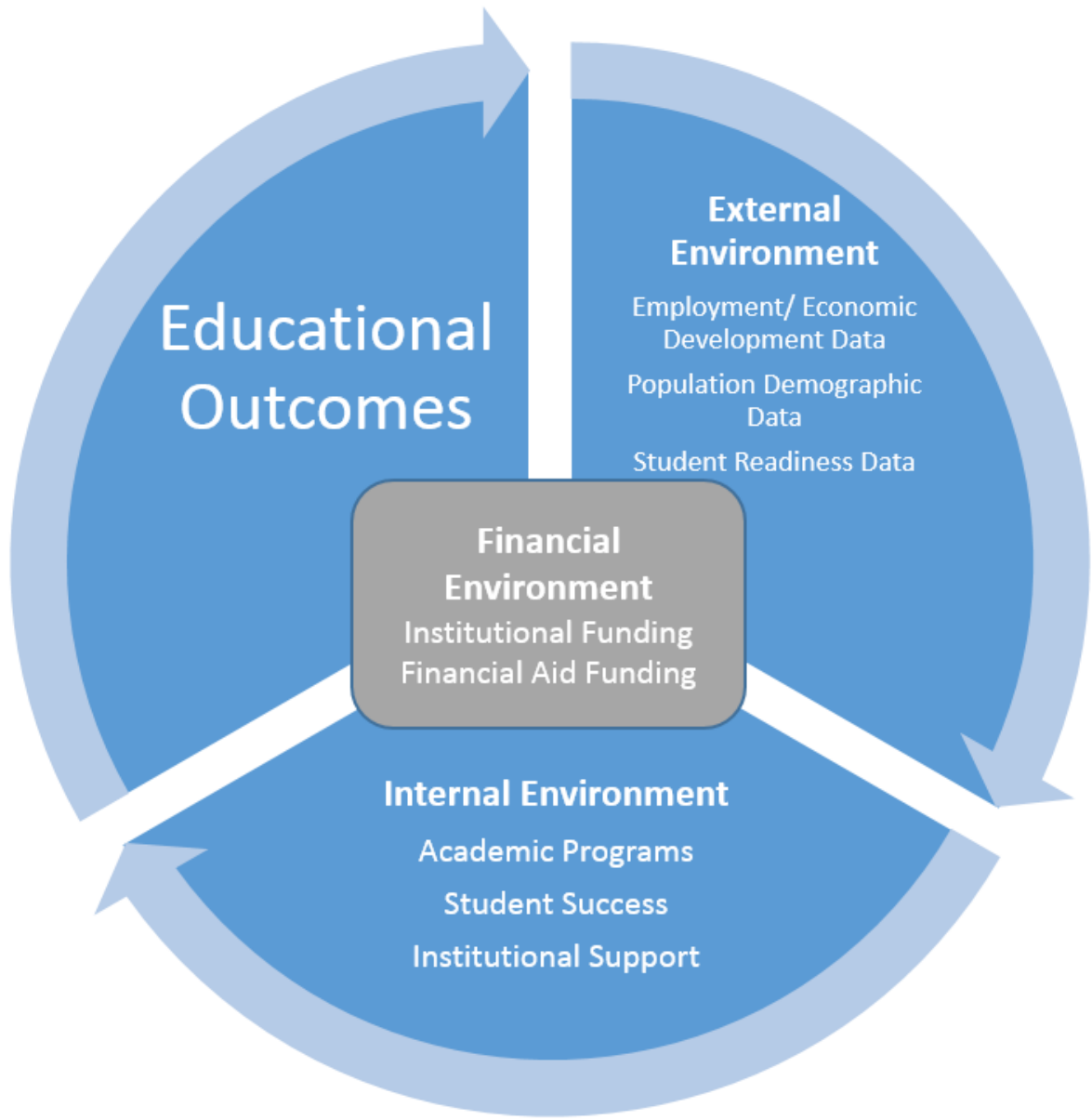
State Scholarship Programs

State scholarship programs are a critical component of affordability and should also align with the goals of this plan. Along with merit-based programs, need-based grants should be considered to encourage enrollments by adults and underserved student groups. However, scholarship funding only addresses the financial needs of these students and should be part of a broader package of services geared toward removing barriers to success.



<http://www.adhe.edu/institutions/higher-education-master-plan/>

Closing the Gap 2020 Planning Framework



Closing the Gap 2020: A Master Plan for Arkansas Higher Education Draft

Objective

The objective of this five year plan for Arkansas higher education is to increase educational attainment of Arkansans by 2020 to close the gap between workforce needs and attainment levels. Progress will be measured by comparing the percentage of Arkansans holding a certificate or degree, as determined by U.S. census estimates, to the workforce skills needs, as determined by job projections in the publication “Recovery: Job Growth and Education Requirements through 2020.”

Through implementation tactics resulting from this plan related to adult enrollments, minority student enrollments, student preparedness and student completion, Arkansas institutions will close this attainment gap by increasing the total number of credentials awarded annually by 50% over 2013-14 academic year levels. However, as the projected workforce needs summarized below indicate, these increases should not be evenly distributed across all credential levels. The greatest needs indicated by employment projections are technical certificates, followed by associate’s degrees, then bachelor degrees. Goals for credential awards in the 2019-20 academic year are as follows.

	2019-2020
	<u>Awards</u>
Technical Certificates	19,200
Associate’s Degrees	12,700
Bachelor’s Degrees	<u>19,900</u>
Total	<u>51,800</u>

This level of increase will raise the number of credential holders in Arkansas by approximately 47,000; closing the attainment gap by 20% and setting the stage for more dramatic increase during the 2020-2025 planning period. This five year planning cycle is an important component of the long-term objective to reach a 60% post-secondary attainment rate in Arkansas, increasing from the current estimate of 43.4%.

This five-year plan is designed around responding to three fundamental questions.

- What are the state’s goals and expectations for its higher education system based on needs of students, employers, and economic indicators?
- How should higher education be financed to best promote these goals and expectations?

- How should the higher education system be held accountable for meeting these goals and expectations?

Baseline data

2013 U.S. Census Bureau data show that 28% of Arkansans hold an associate's degree or higher. Certificate holders are unaccounted for in census data but are estimated, based on adults with one year or more of college credits, to be 15.4% of the population. Below is a summary of 2013 Arkansas educational attainment statistics along with projected employer needs to fill job projections in 2020 and the estimated attainment gap.

Education Level	2013 Attainment Levels (1)	2020 Projected Needs (2)	Attainment Gap
High School Diploma or Less	56.6%	41.0%	
CTE Certificate or less than 2 years college	15.4%	22.0%	-6.6%
Associate's Degree	7.1%	12.0%	-4.9%
Bachelor's Degree	13.8%	18.0%	-4.2%
Master's Degree or Higher	7.1%	7.0%	1.0%

(1) U.S. Census Bureau 3-Year Public Use Microdata Samples 2011-2013

(2) *Recovery: Job Growth and Education Requirements Through 2020*. Georgetown University Center on Education and the Workforce

Based on 2013 Arkansas population estimates (U.S. Census), these data suggest a gap of approximately 236,000 Arkansas residents who have earned education credentials below the level required to meet the projected 2020 workforce needs. This education gap is further segregated as follows.

Education Level	Attainment Gap
CTE Certificate or less than 2 years College	99,433
Associate's Degree	73,535
Bachelor's Degree	63,582
Master's Degree or Higher	(786)
	<u>235,764</u>

Planning Environment

To fully meet employer needs and provide the workforce necessary to support future economic development, it is essential that we close this attainment gap. This can only be accomplished through a coordinated emphasis on increasing enrollments in strategic populations and improving completion rates of those who enroll.

In 2013, Arkansas colleges and universities awarded 38,127 credentials from certificates of proficiency through graduate degrees. This was an increase of 10,270 over the number awarded in 2008, or a 36.9% increase. During this same period, the population of Arkansas adult residents (between ages 25 and 64) increased by approximately 40,800. As a result of these changes – population and certificate and degree production – educational attainment in the state only increased from 42.1% to 43.4%.

Clearly, increased efforts are necessary to move the level of educational attainment to that required to meet employer needs. To do this, it is important that higher education institutions in the state concentrate on the areas of enrollment and attainment in which we are most significantly lagging. Data suggest three primary areas of focus:

- Adults who have earned no postsecondary credentials
- Minorities and students from low-income families who enroll in higher education at lower rates and complete at lower rates
- Student success rates that lag those of other states in the southern region and US

In addition, affordability must be a central component to any efforts to improve Arkansas attainment rates.

According to the Lumina Foundation’s 2015 annual report, *A Stronger Nation through Higher Education*, Arkansas is home to over 500,000 adults, or almost 35 percent of the population, who are high school graduates but have completed no college hours. Another 350,000 have some college credits but no degree. Based on these statistics, it is clear that a significant change in higher education attainment levels in the state can only be achieved through a concentrated effort to encourage adults to return to college, or enroll for the first time.

Examining college enrollments and completions by race reveals a second area of focus essential to moving the needle on attainment. African-American and Hispanic residents of the state lag far behind other races in degree-attainment and in the rates at which they enroll in higher education. The Lumina Foundation reports the following degree attainment rates in Arkansas.

White	31.31%
African-American	21.26%
Hispanic	13.05%
Asian	48.86%
Native American	23.20%

The third concentration area essential to planning efforts is in the graduation rates of those who enroll in higher education. Arkansas universities ranks 15th out of the 16 southern region states in the graduation or progression of students toward a degree after six years (SREB, 2015). The Arkansas rate of 63.2% lags 13.3% behind the SREB average. The results are more promising at community colleges in the state, where three year graduation rates and total progression rates are both at the SREB average, despite first-year persistence rates near the bottom of the region.

Finally, affordability is an important consideration in the ability of students to enroll and complete higher education. Though recent data show that the percentage of family income needed to pay for college in Arkansas is among the lowest in the region in 2012 at 21% (SREB, 2015) these data do not account for the effects of recent tuition increases. With a lack of additional state appropriations in

recent years, tuition and fees have risen by an average of 25% for four-year institutions and 32% for two-year institutions from fall 2009 to fall 2014 (ADHE, 2015), negatively impacting affordability.

2020 Goals

GOAL 1: Raise completion and graduation rates for colleges and universities by 10%. The 150% graduation rate is most often reported as a standard for determining institutional effectiveness. The most recent 150% graduation rate for four-year institutions, which is based on the fall 2008 student cohort, is 40.0% and for two-year institutions, measured by the fall 2011 cohort, is 19.9%. Though these metrics do not account for a significant portion of higher education enrollments, those who do not begin as full-time students, immediately after high school, they are the most frequently cited national statistics. Therefore, targets for 2020 are a 50% graduation rate for four-year institutions and 30% for two-year institutions. In addition, more broadly defined measures of completion rates should be utilized to accurately measure student success and institutional effectiveness.

To achieve these graduation and completion rate goals, there must be accompanying improvements in intermediate measures of student preparedness.

Reform Remedial Education to reduce remedial course enrollments and increase student success rates. A better understanding and implementation of college readiness will provide a basis for guiding students to appropriate certificate and degree programs and remedial courses necessary to prepare students for credit-bearing courses. Arkansas 2014 remediation rates of 67.2% for community colleges and 28.8% for universities indicate that there is a significant gap between high school and college expectations that must be addressed.

Arkansas has, for many years, used an ACT score of 19 on each subject area assessment as the benchmark for readiness for college-level work. Although ACT scores are an important predictor of student success, they should be used in combination with other student-related data, such as high school GPA, student demographics and measures of student motivation to succeed. Using data analytics, we should provide better indicators of the likelihood of student success in college-level courses and clearly identify the efforts needed to get more students college ready, realizing that those indicators may vary by student demographics, such as age or socio-economic status, and by post-secondary program in which the student enrolls.

Students requiring remediation pay more in tuition and are less likely to complete a credential. Of those students requiring math or English remediation, typically only 25-30% successfully enroll in and pass the college-level course required upon completion of remediation (ADHE Remediation, 2015). Improvement in remediation rates, and thus improving completion rates, requires an increased and coordinated efforts on the part of school districts and colleges and universities to better prepare students before high school graduation.

In fall 2014, 41.4% of Arkansas students enrolled in at least one remedial course. At four-year universities, that rate was 28.8% and at two-year colleges it was 67.2%. Each of these rates have fallen annually since fall 2010. While most students needed remediation in just one subject area, 26.5% of students in fall 2014 required remediation in all three subjects – math, English and reading.

Examining these rates by student demographic characteristics provides more detail about remediation. For students in all age groups from age 20 to age 55 and up, remediation rates exceed 75% at four-year

institutions and 80% at two-year institutions. By race and ethnicity, remediation rates are highest for African-American and Hispanic students. A better understanding of these variations in remedial needs should influence and refine institutions' approaches to remedial education.

Reducing the rate of enrollments in remedial courses will require efforts related to students coming to higher education directly out of high school and for adults, with differing approaches necessary to respond to each group. Improving the preparedness of high school students will require strategies for earlier identification when those students begin to fall behind and collaborative efforts between Arkansas high schools and colleges and universities to intervene when students do fall behind. For adults, it will be necessary to implement strategies designed to reduce the time and cost necessary to prepare them for college level work.

For too many Arkansas students, achieving their goal of completing a certificate or degree program is delayed, or thwarted, by required enrollment in remedial courses. Although these courses are essential to preparing students for success in college-level courses, they also add to the cost and time required to complete.

By following best practices for remedial education, we can reduce the time to degree for many students and improve persistence and graduation rates.

- Use historic data to determine remedial or credit-bearing placement to achieve success.
- Eliminate, to the extent possible, semester long remedial courses through implementation of accelerated, supplemental instruction or co-requisite models.
- Examine high school-college bridge programs which have demonstrated success in improving college readiness before high school graduation to determine best practices for adoption.

Re-examine gateway courses for appropriateness to the students' education goals. There has been some effort nationally and across Arkansas to provide alternatives to gateway courses, such as College Algebra, that are more appropriate to students' educational goals while maintaining academic rigor and quality. Though some of these changes have been adopted, they do not have widespread acceptance and integration into institutional practices. Where appropriate, additional efforts should be made to reduce or eliminate barriers to student success by ensuring that gateway courses are appropriate to student educational pathways.

Raise first year retention rates to SREB regional averages. Students leave college for many reasons. Studies of student persistence generally find these reasons to be centered on poor academic performance, financial issues, personal and social issues and discouragement over lack of academic progress. There are many examples of programs or initiatives at Arkansas institutions designed to combat these challenges to student retention. By closely examining these programs to determine those that have been proven to be most effective, these efforts can be adopted more broadly and can improve retention rates in the state.

In Arkansas universities, first-year persistence rates are among the lowest in the region, with 79% of the 2012 freshman cohort still enrolled the next fall, a rate that is 5.5% below the SREB average. A similar result is found at Arkansas community colleges where 53.5% of the 2012 cohort was still enrolled a year later. This rate trails the SREB average by 8.4%.

Guided pathways to student success. As the jobs projections data above indicates, bachelor's degrees are important to meeting the workforce needs of the state but they are not the only path to

employment and higher-wage jobs. Students, those coming directly from high school and those returning as adults should be provided clear information about the most appropriate pathways to meet their eventual employment goals. Pathways should incorporate all appropriate student outcomes from short-term industry-recognized credentials through the highest degree programs appropriate to the identified career goals and include career step-out points at the completion of each credential.

GOAL 2: Increase by 75% the enrollment of adults, age 25 to 54, by fall 2018. By 2020, almost 60% of jobs in Arkansas will require something beyond a high school credential. However, only 25% will require a bachelor's degree or higher. The positive result of these statistics for adults is the fact they do not necessarily need to invest the time required to earn a four-year degree. Adults can, in some cases, prepare themselves for higher paying jobs by earning short-term certificates or two-year associate's degrees, which should be a better fit for the time demands of those who must balance work, families and school.

To produce the desired increase in credentials by 2020, enrollments must be increased ahead of this date. Therefore the enrollment goal has been set for fall 2018. In addition, enrollments should shift from 4-year to 2-year institutions to achieve the necessary mix of certificate, associate's and bachelor's degrees. The table below presents enrollments for this age group in fall 2014 along with enrollment targets by fall 2020.

	Fall 2014	Fall 2018
	<u>Actual</u>	<u>Target</u>
Public, 4-year	26,068	32,500
Public, 2-year	17,777	46,500
Private	<u>3,544</u>	<u>3,900</u>
Total enrollment	47,389	82,900

These enrollment targets are heavily slanted toward two-year institutions to align with the need for a greater increase in technical certificates and associate's degrees.

Reduce the remedial course enrollments for adults by 50%. Current remediation rates for adults exceed 80% in most cases. Knowing this, it is imperative that we recognize the need to prepare them for their return to education. At the same time, we must be cognizant that these students must begin to accumulate credits toward a credential quickly to keep them engaged. Therefore, alternatives to semester-long remediation courses must be used to get adults caught up and prepared for credit-bearing courses.

Communicate the value of higher education. We must better communicate the value of higher education, demonstrating the impact postsecondary attainment can have on the lives of Arkansans, to those who failed to complete or never attended. Through this effort, it will be important to communicate the impact education can have on quality of life and standard of living for the student and student's family, along with the benefits afforded to the student's community.

GOAL 3: Raise the credential attainment rates of underserved student groups in the state relative to other students by 10%.

African-American and Hispanic students in Arkansas attend, persist and complete higher education at lower rates than other races. In addition, students from families in lower income profiles have the lowest educational attainment rates, according to national data (Crow, 2014).

Raise the college going rate of underserved minority groups, African-American and Hispanic, equal to that of non-minority students. The Arkansas college-going rate significantly lags the US average, with only 54.3% of high school graduates going on to college in 2013 compared to a 66.2% national average. Exacerbating this issue is an additional disparity in college-going rates by race and ethnicity. For Hispanics in the state, the gap is small, with less than a 1% difference in the college-going rate compared to whites. However, for African-Americans the disparity is greater than 10% with only 45.1% of high school graduates going on to college in fall 2013.

Raise the completion rates of underserved minority groups, African-American and Hispanic, equal to that of non-minority students. In addition to the disparity in college-going rates for underserved minorities, completion rates for these students also trail those for their non-minority counterparts. In academic year 2013-14, African-American student completions as a percentage of white student completions were 80% at four-year institutions and 84% at two-year institutions. Hispanic student completions as a percentage of white student completions were 66% at four-year institutions and 75% at two-year institutions.

	<i>Completions per 100 Students</i>	
	<i>Four-Year</i>	<i>Two Year</i>
Asian	19.4	27.2
White	23.4	30.3
African-American	18.8	25.5
Hispanic	15.5	22.6

Communicate the value of higher education. One way this racial and economic divide can be eliminated is through a coordinated effort to better communicate the value of higher education, demonstrating the impact degree attainment can have on the lives of Arkansans. For generations of many Arkansas families, education has not been seen as important. A culture change is necessary to engrain the importance and value of education for all Arkansans.

GOAL 4: Improve College Affordability through Effective Resource Allocation

State funding for higher education has seen minimal increases in the last decade and is not likely to change dramatically in the near term. As a result, it has been necessary for institutions to raise tuition annually to keep up with rising costs. Tuition and fees have risen by an average of 25% for four-year institutions and 32% for two-year institutions from fall 2009 to fall 2014 (ADHE, 2015).

Reduced time to degree. One way that the effects of rising tuition can be offset is through reducing the time it takes a student to complete a credential. Time to degree can be influenced by two factors: the number of course attempts a student accumulates and the total hours in which a student enrolls each semester. Whether through reducing remediation needs or reducing the amount of flexibility students have in course selection, course attempts can be reduced while maintaining academic quality. Through clearer degree plans, intrusive advising or mentoring, and other intervention efforts, institutions can better assist students in staying on track to completion.

Full-time enrollment should be encouraged, though not required, through state and institutional policies. Full-time enrollment reduces the number of semesters required to complete a credential, thereby reducing accompanying costs for living expenses, transportation and personal expenses. In addition, summer enrollments can be an important variable in reducing time to degree if state and

institutional financial aid policies are adapted to improve affordability. Currently, students have few options for financial aid to reduce the cost of summer course enrollments.

Allocate 25% of state scholarship funds to need-based programs. Since the implementation of the Arkansas Scholarship Lottery, most state financial aid funds have been directed toward merit-based aid. Though these scholarships have been important, they miss the mark on affordability. Though these scholarships have played an important part in the affordability equation, they have inequitably been directed primarily to high-achieving, traditional students. On a national level, state financial aid programs are primarily directed to need based aid, with 75% of state aid being need-based in 2014 (Woodhouse, 2015). In Arkansas, only 6% of state aid was based on need in that same year.

If the goals of this plan are to be realized, a portion of financial aid resources must be directed to underserved minorities and adults on the basis of need, rather than merit. Though performance should not be a consideration in awarding these scholarships, it must be required for retention of the scholarships to encourage continued enrollment.

Re-allocate institutional spending to maximize efficiency and effectiveness. Affordability can also be improved through a review of institution resource allocation decisions to maximize efficiencies without sacrificing educational quality. Institutions often fail to recognize the connections between spending decisions and student outcomes and, as a result, can overspend in areas that do not lead to completions and underspend in areas that do. By closely examining resource allocations, institutions have the opportunity to improve both efficiency and effectiveness.

Increase core expense ratio. Resource allocation decisions must be made that maximize core functional expenses which have an impact on the effectiveness of institutions in helping students complete credentials (Powell, 2012). By identifying inefficiencies in non-core functional expenses, resources can be re-directed to core areas which are directly related to student success. Examining the ratio of instruction, academic support, student services expenses to institutional support expenses per FTE student provides an indicator of core expense allocation which can be compared to appropriate benchmarks to identify potential efficiencies. One potential benchmark for this measure is the annual SACUBO Benchmarking Study.

Administrative positions. A 2014 Delta Cost Project Study (Delta, 2014) shows a decline in the number of FTE faculty per FTE executive and professional staff at all types of public institutions from 1990 to 2012. This shift has occurred as institutions added administrative staff to accommodate needs in academic support, student services, compliance and other administrative areas. Though these are important functions of a college or university, they take valuable resources away from the hiring of teaching faculty. Closely examining this ratio for institutions and comparing to appropriate benchmarks may reveal additional opportunities for efficiencies. These benchmarks should recognize the importance of staff outside the classroom who contribute to student success through advising, tutoring, mentoring, and other critical services.

Raise faculty salaries to regional average. Though this initiative seems to run counter to the idea of increasing affordability, it is an important consideration in the improvements outlined above in student retention and completion as quality faculty are essential to these efforts. Arkansas ranks last in the SREB region in average faculty salaries at \$65,173 for four-year institutions, which is \$11,856 below the

average. The gap is slightly smaller at two-year institutions at \$8,386 below the SREB average of \$52,158 and next to last in the region. Improvements to these salaries can be achieved by reallocation of institutional funds through the efficiency measures above.

Implementation Plans

Implementation of this master plan for Arkansas higher education can be achieved through two primary means.

- Following a best practices approach to address the changes in policy and practice necessary to achieve the goals of the plan.
- Aligning resources dedicated to higher education, including appropriations to the institutions of higher education and state financial aid programs, with the desired outcomes of the plan.

Best Practices Consortia

The objective of these consortia is to identify existing, effective programs that can be implemented more broadly across the state and to generate innovative solutions that can be introduced, then expanded. Innovative programs should be encouraged without risk of failure.

Adult Learners Consortium – resources and best practices to support adult enrollment and completion. For planning purposes, adults include anyone age 25 or older or who has not been enrolled in secondary or postsecondary education in five or more years. Research and experience have shown that responding to adult learner needs is often quite different from that for traditional students. For adults, the barriers to completion are often much greater due to family, work, and personal priorities that conflict with educational goals. Flexibility in scheduling course offerings and services and more structured pathways two examples of ways to build more adult friendly programming.

Examples of existing programs

College Readiness – Fast Track Developmental Education
Student Mentorship/Coaching – Career Pathways Initiative

College Readiness Consortium – resources and best practices around services for students with traditionally lower college going rates and completion rates to better prepare them for postsecondary enrollment. Often, we consider students to be college ready when they have achieved sufficient test scores to exempt them from remedial courses. There are, however, other factors that must be considered in whether a student can be expected to successfully complete a certificate or degree program. Social skills, communication skills and motivation to achieve can be as important as academic preparedness. In addition, high school GPA has been shown to be a better predictor of student success than test scores in multiple studies and many institutions across the country are eliminating test scores as an entrance requirement.

Examples of existing programs

College Readiness – Southwest Prep Academy

Gear Up – Phillips Community College
Mentorship – Donaldson Academy

Remediation Consortium – resources and best practices around remedial programs that successfully prepare students for credit-bearing courses while reducing the time invested in remediation. Co-requisite remediation, blended courses, fast track remediation and self-paced modules are all examples of remediation reform efforts. The impact of summer should also be considered, both for bridge programs to prepare students for postsecondary enrollment and to reduce knowledge loss between spring and fall terms.

Student Success Innovations Consortium – encourage innovative methods to address efficient delivery of academic programs and services to achieve student success, with success defined as students reaching their educational goals. A number of innovative approaches can be considered, including:

- Measuring employability of students
- Student transcripts which also recognize the non-academic skills students gain through postsecondary enrollment
- Measuring progress toward credentials (e.g. Prior Learning Assessment and Competency Based Education)
- Assessment of student learning through
- Eliminating external barriers to student success, such as financial and personal struggles

Affordability Consortium – discovering best practices around institutional resource allocation decisions that maximize effectiveness while recognizing the need to improve affordability to provide fair and equitable access to higher education. A combination of investments from students, institutions, state programs and federal programs must all be considered in the affordability conversation. Examples of efforts to improve affordability include:

- Encouraging manageable amounts of student loan debt through better counseling
- Availability of financial aid in summer terms
- Shared administrative services
- Collaborative delivery of academic content across institutions
- Structured pathways which lead students to degrees faster and with fewer hours completed

Institutional Funding Consortium – using outcomes-based funding to properly align institutional funding with statewide priorities for higher education. Outcomes-based funding can be used to encourage programs and services focused on student success and to incentivize progress toward state-wide goals. However, designing appropriate outcomes metrics is critical to the success of these models. Any new funding model must be built around a set of shared principles embraced by institutions and aligned with goals and objectives of this plan.

Communication Strategies Consortium – using communication strategies to create a culture in the state which places greater value on the personal and societal benefits that accrue from postsecondary education. Beyond just encouraging education, communication efforts must link education to the skills required by employers and to available jobs through a publicly available database. For true culture change, these messages must extend from young (early grades) to old (adults).

Funding Recommendations

Arkansas supports higher education through two funding mechanisms: direct appropriations to public two-year institutions, public four-year institutions, and related entities; and through scholarship awards to students enrolled at public or private institutions in the state. Both forms of support are essential to sustaining and improving educational attainment.

Institution Funding Formulas

Arkansas has historically funded higher education loosely based on enrollment-based formulas. In 2011, a performance component was introduced which penalizes institutions that do not meet pre-determined performance measures. Most research around state funding formulas suggest that both approaches are problematic. Additionally, funding has lagged the amounts recommended by formula due to limitations on the state's budget to the extent that only a small number of institutions receive the full amount recommended by formula.

A fully outcomes-based model is proposed to address these concerns. Through this model, institutions would receive continued funding based on achievement of specific outcomes metrics. These metrics must align with the goals of the plan while also allowing flexibility to respond to the unique nature of each two-year and four-year institution and recognizing the need for stability in annual funding for operations. In addition, colleges and universities should have opportunities to earn incentive funds based on achievement levels.

- Innovation Funds – Institutions that exceed outcomes targets should have access to innovation funds which can be used to create or enhance programs which are expected to further impact achievement through one of the emphasis areas of this plan. If these innovative programs are successful, innovation grant funds become part of the institution's base funding at the end of the grant period. Funding is discontinued if unsuccessful.
- Improvement Funds – Institutions that lag their outcomes targets would have access to improvement funds to address deficient areas. Institutions must submit a proposal which describes how the improvement grant will be used to improve outcomes. If successful, the institution's base funding will be restored if outcomes targets are reached. If targets are not reached after completion of an improvement project, base funding will be reduced.

State Scholarship Programs

State scholarship programs must also align with the goals of this plan. Scholarships are an essential component of affordability. However, scholarships awarded without strategic direction are often

ineffective. In fact, studies have shown that universal scholarships, those awarded to all students regardless of need, can lead to equal rises in tuition (Gillen, 2012).

To support the goals of the program, state scholarship and grant programs must be reconsidered with an emphasis toward the students who have been identified in the plan as integral to changing the landscape of educational attainment in Arkansas. Among others, this would suggest that scholarship funding should be directed to adult students, minority students and students enrolled in certificate programs. Though programs currently exist in these areas, more effort is needed to move the needle in a significant way. Because additional state scholarship funding is unlikely during the planning period, a re-design of existing scholarship programs may be necessary to align scholarship funding with desired educational outcomes.

Awarding scholarships to students based on high school academic performance is important. Students who work hard to prepare themselves for college success should be rewarded for their efforts. However, state financial aid programs must have other objectives if they are to meet the needs of the wide range of students who enroll in our colleges and universities.

Conclusion

There is a clear gap between the needs of Arkansas employers and potential employers and educational attainment levels of state residents. Closing this attainment gap will require alignment of goals with available resources to lead to the additional completions, both certificates and degrees, necessary to change the landscape in our state. This plan provides decision makers at state and institutional levels with an outline to meet the challenge and close the gap.



<http://www.adhe.edu/institutions/higher-education-master-plan>

Resources

ADHE (2015). *ADHE Form 18-1 Annual Full-time Undergraduate Tuition and Mandatory Fees*. Arkansas Department of Higher Education.

ADHE Remediation (2015). *Assessment of Remediation Efforts in Arkansas*. Arkansas Department of Higher Education

Carnevale, A., Smith, N., and Strohl, J. (2013). *Recovery: Job Growth and Education Requirements through 2020*. Georgetown Public Policy Institute, Center on Education and the Workforce.

Crow, Michael (2014). *The Next Disruption in Higher Ed is Collaboration*. Retrieved from <https://www.youtube.com/watch?v=M3FKYK8HTXM>

Gillen, A. (2012). *Introducing Bennett Hypothesis 2.0*. Center for College Affordability and Productivity

Lumina Foundation (2015). *A Stronger Nation through Higher Education*.

NCHEMS (2015). *NCHEMS Information Center for Higher Education Policymaking and Analysis*. Retrieved from www.higheredinfo.org

Powell, B., Gilleland, D. and Pearson, L. (2012). *Expenditures, efficiency, and effectiveness in US undergraduate higher education: A national benchmark model*. The Journal of Higher Education, January/February 2012.

U.S. Census Bureau (2015). *2011-2013 ACS 3-year Public Use Microdata Samples (PUMS)*. Retrieved from <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Woodhouse, Kellie (2015). *States Grow Need-Based Aid*. Retrieved from <http://www.insidehighered.com/news/2015/10/05/financial-need-aid-priority-most-states>