

GUIDING IMPERATIVES

TO NAVIGATE A RAPIDLY CHANGING ENVIRONMENT



Educational Master Plan

2020-2031





Purpose and Intent

Higher education is encountering profound changes at a pace and scale that is often difficult to fathom. Similarly, society as a whole is experiencing a fourth industrial revolution in which disruptive technologies are changing how individuals work, live, and learn. While it is unlikely that the future can be accurately predicted, it is possible to prepare for the journey and position American River College to thrive. It is also possible to dream about what could be and influence the future by cultivating new opportunities that capitalize upon the shifting landscape.

As the most long-range and comprehensive of American River College’s planning documents, the Educational Master Plan (EMP) is intended to set the vision for the institution through the year 2031 so that it can be used as a navigational tool across various integrated planning processes to concentrate efforts in the same direction. Plans of this type are often static documents that lay out a linear roadmap for the future and prescribe a set of specific methods to achieve narrowly defined goals. However, this plan applies a different approach that acknowledges the ambiguous, complex, and rapidly changing environment in which ARC exists. Rather than a mandate, the EMP will serve as a compass that identifies strategic imperatives upon which the college will focus its efforts and resources. Simultaneously, the plan endeavors to create the conditions for adaptability and innovation so that the organization can become increasingly agile.

Each strategic imperative is truly a call to action that responds to one or both of these questions:

- *What **must** we do, regardless of the environment, in order to achieve our mission and fulfill our commitment to social justice and equity?*
- *And recognizing the key strategic issues and emerging trends, what **should** we do to become more effective and remain relevant in a dynamic environment?*

The imperatives may be considered as broad themes that hold significance across the institution and can resonate through various planning processes. By rallying around these imperatives and applying collective effort through a variety of methods, there is strong potential to create positive change and move ARC into a vibrant future in which all students are well served and prepared to succeed.

Vision, Mission, Commitment

The imperatives shared within this plan are considered essential to achieving American River College’s mission and realizing its overarching vision. Moreover, the response to each imperative is grounded in ARC’s commitment to social justice and equity which defines how those involved will approach this work.

OUR VISION

Transform the future of all students and our community through inclusive, equitable education.

OUR MISSION

American River College places students first in providing an academically rich, inclusive environment that inspires critical thinking, learning and achievement, and responsible participation in the community.

American River College, serving the greater Sacramento region, offers education and support for students to strengthen basic skills, earn associate degrees and certificates, transfer to other colleges and universities, and achieve career as well as other academic and personal goals.



OUR COMMITMENT TO SOCIAL JUSTICE AND EQUITY

American River College strives to uphold the dignity and humanity of every student and employee. We are committed to equity and social justice through equity-minded education, transformative leadership, and community engagement.

We believe this commitment is essential to achieving our mission and enhancing our community.

Executive Summary: The Imperatives

Ten strategic imperatives emerged through project team dialogue, input gathered from the college community, and review of the Institutional Equity Plan. While numbered for reference purposes, each imperative is considered to be critically important to achieving the mission. A brief overview is offered below while each topic is discussed in more detail throughout the remainder of this document.

IMPERATIVE 1: CLOSE THE OPPORTUNITY GAP

Observation: A substantial opportunity gap exists for students of color and other historically underserved groups that inhibits their educational access, achievement, persistence, and completion. Barriers to educational attainment further intensify existing socio-economic inequities. Many students face daunting hurdles such as homelessness and food insecurity that inhibit goal achievement. ARC is already moving in a direction to close the opportunity gap through its commitment to social justice and equity as well as actions supporting the strategic goals of “Students First” and “Clear and Effective Paths”.

ARC Response: Holistically, ARC will close the opportunity gap across all stages of the student lifecycle by 2031. The college will continue its existing redesign efforts and demonstrate measurable improvement in outcomes for historically underserved students. It will also work towards actualizing the recommendations of the Institutional Equity Plan in order to create a more equitable and inclusive institution. ARC will seek growth by expanding access and broadening its reach to areas and populations that have not been fully served in the past. It will respond to the unique role of the community college by ensuring that students have access not only to education, but to the basic life necessities that are a prerequisite to participation.

IMPERATIVE 2: PREPARE STUDENTS FOR AN EVER-CHANGING LANDSCAPE OF WORK

Observation: Rapid technological advances are transforming the world of work. It is likely that many cognitive, service, and manual tasks (rather than entire jobs) will be automated in the future as artificial intelligence and advanced robotics become ubiquitous. The linear trajectory of education as preparation for a single career is no longer the norm. The self-employed workforce is growing as individuals elect, by choice or necessity, to engage in independent short-term gigs. The age range of the workforce is expanding and there is an increased demand for upskilling, reskilling, and learning across a lifetime.

ARC Response: Across its programs, the college will offer a wide range of opportunities for rapid reskilling and skill advancement to support individuals as they navigate career transitions, self-employment, and an increasingly technology-enabled workplace. ARC will nurture basic digital fluency for all students, as well as offering technical training in emerging technologies. Emphasis will be given to mitigating inequities in worker displacement by providing a path to re-employment in fields with a median living wage and secure job outlook.

IMPERATIVE 3: INTEGRATE ESSENTIAL SKILLS

Observation: Exposure to broad knowledge develops essential skills such as critical thinking, creativity, communication, ethics, and social responsibility that translate across all aspects of work and life. In a rapidly changing environment, these skills hold particular value by providing a frame for considering challenging ideas and conflicting information. While it is undeniable that these skills are vitally important, they have traditionally been acquired through a liberal education which is offered to those seeking a degree path. These skills need to be more fully integrated and packaged in different ways to influence individuals who are electing to pursue short-term learning or skill building.

ARC Response: The college will empower future students and enrich its community by developing well-rounded, resilient individuals who possess a practical blend of technical and soft skills that can be applied throughout life. Creative methods will be utilized to expose students, irrespective of program length, to educational experiences that develop essential skills. ARC will intentionally bond career education and liberal education by fostering curricular integration and faculty interaction. It will ensure that all students, regardless of socio-economic background, are encouraged to grow and expand their capacity to contend with ambiguity, complexity, diversity, and change.



IMPERATIVE 4: TAILOR EXPERIENCES TO THE INDIVIDUAL (STUDENT-CENTRIC)

Observation: Students enter college with a variety of life experiences, challenges, aptitudes, skill sets, and goals. The working learner or re-entry student may have very different priorities from the incoming freshman who is a digital native or the former foster youth who is the first generation to attend college. Standardized (one-size-fits-all) experiences fail to meet the needs of today’s learners. Students expect educational institutions to provide flexible learning options and personalized digital experiences that are similar to those received through consumer technologies. Traditional educational models are institution-centric by design.

ARC Response: The college experience will be tailored to fit the student, rather than expecting the student to fit into a standardized college model. ARC will expand access to education by increasing flexibility and reducing institutional constraints. It will disrupt the academic calendar and eliminate barriers to enrollment by providing a viable option that is attractive and accessible to a variety of non-traditional students. Through a blend of human interaction and technological tools, ARC will extend a level of personalization that recognizes students as individuals and inspires them towards goal completion.

IMPERATIVE 5: STRENGTHEN CONNECTIONS WITH EMPLOYERS

Observation: Regional and local employers report a lack of skilled employment candidates and are also seeking expanded development opportunities for incumbent workers. However, existing college practices and curriculum processes lack the agility to proactively feed the labor pipeline and respond to immediate training needs. Opportunities exist to strengthen connections in order to become the preferred training provider for various agencies and employers, but only if ARC bridges the expanse between what employers need and how colleges tend to operate.

ARC Response: The college will strengthen connections to employers and create a pipeline of skilled employees that are prepared based on current industry specifications. ARC will minimize institutional barriers and become the preferred training partner of employers in the region. It will facilitate frequent interaction between employees, industry professionals, and business organizations to ensure that ARC programs are in sync with employer needs. It will work with its employer partners to minimize barriers in the workplace that may inhibit the future employment and success of marginalized populations.

IMPERATIVE 6: STIMULATE EXEMPLARY TEACHING AND LEARNING

Observation: The future of learning is expected to be substantially different from the traditional classroom model based on seat time. There is a growing demand for efficient, contextualized, simulated, and experiential learning. Technological innovations offer the prospect to expand the learning environment with immersive experiences and interactive methods that can assist students to quickly grasp and apply knowledge. Simultaneously, institutions must contend with the ideal balance between human interaction and absolute reliance on technology.

ARC Response: Faculty will be encouraged to stay at the forefront of their craft through exploration of learning science, emerging technologies, and other frontiers that have the potential to progressively develop instructional excellence. ARC will stimulate exemplary teaching and learning by embracing a forward-thinking approach to how it delivers education and providing resources that enable the use of modern methods. It will strive for excellence by pushing boundaries to foster engaging and equitable education. The physical and virtual classroom will be reimaged to ensure it is ideally suited to new techniques.

IMPERATIVE 7: ADAPT THE PHYSICAL CAMPUS

Observation: External factors, such as the growth of online education, are signaling that the role of the physical campus may change and that space is likely to be used in different ways. Campuses are being redeveloped as gathering spaces for collaboration, community-building, and experiential learning. As self-service options grow, students are less likely to approach campus to transact business and seek information, but facilities will remain vital as an access point for services, discipline-specific equipment, and cutting-edge technology.

ARC Response: Looking to the horizon, the institution will evolve the physical campus based on future needs, rather than current realities. ARC will vigorously strive to make its facilities more inclusive and accessible. It will be aspirational as it plans for changes in how the campus will be used by students as well as the increasing technology and energy demands. It will gravitate towards greater flexibility in space design and heightened environmental stewardship.

IMPERATIVE 8: ACHIEVE OPERATIONAL EFFECTIVENESS

Observation: Institutional agility is contingent upon strategic transformation of how the college and district operates at the most basic level. Many institutional processes and systems are inefficient and have not kept pace with the external environment. The clunkiness of existing practice is a barrier to institutional agility and progress. In many cases, policies and labor-intensive procedures result in frustration and sluggishness. Moreover, antiquated practices regularly act as a major hurdle for marginalized populations that can diminish the likelihood of successful outcomes for both students and employees.

ARC Response: The college will aggressively seek to modernize its own practices and strip away clunky methods that inhibit employees from doing their best work. In alignment with its existing strategic goals, it will actively pursue “proactive, effective, and efficient operational systems.” ARC will provide leadership in identifying and renovating antiquated practices that are a barrier to the success of marginalized populations. It will further develop its organizational agility by fostering an entrepreneurial culture that consistently innovates as well as enabling effectiveness through professional growth of its employees.

IMPERATIVE 9: CULTIVATE FINANCIAL SUSTAINABILITY

In order to respond to the previously stated imperatives, the college must have considerable financial resources to invest in its programs, services, delivery methods, facilities, and technologies. Historically, community colleges have been subject to major fluctuations in state funding based on enrollment and the California economy. The introduction of a new performance-based funding formula adds another layer of complexity. Community colleges also anticipate a variety of rising costs. An intentional approach will be needed to ensure the college has adequate resources to fund its future endeavors.

ARC Response: While retaining its core focus that places students first, the college will strategically leverage the incentives of performance-based funding to capture resources with which it can cover the ongoing cost of education. ARC will diversify revenue streams and augment its funding sources in order to maintain an exemplary learning environment that engages students and provides employees with the best tools available to optimize the educational experience. Through its efforts to streamline business practices, the college will endeavor to reduce costs and deploy its resources wisely.

IMPERATIVE 10: BOLSTER ADVOCACY, COLLABORATION, AND COORDINATION

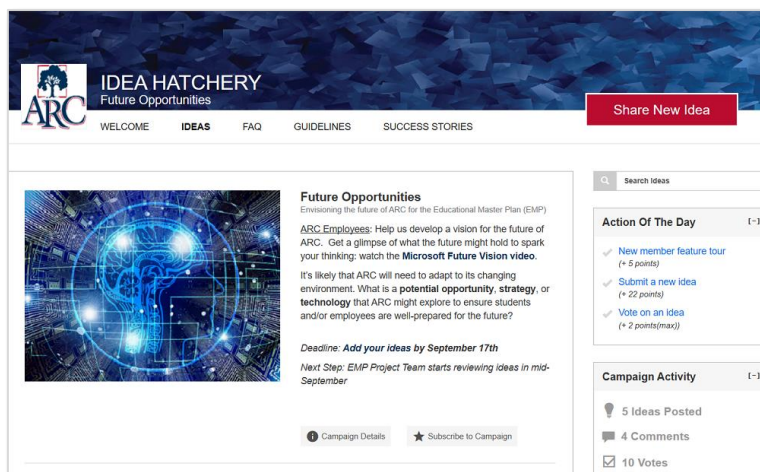
Observation: Within higher education, and particularly within California, there is an increasing emphasis on accountability and educational reform. District boundaries are becoming more transparent as California’s first fully online community college recently opened with a service area that encompasses the entire state. Community college students are also now able to easily enroll in multiple districts simultaneously through the California Virtual Campus (CVC) Exchange. Intersegmental interaction remains a prominent factor and ARC also exists within a multi-college district in which districtwide initiatives and discussions often have local implications. New ways of advocating, coordinating, and collaborating will be necessary in order for ARC to prosper and effectively serve its mission.

ARC Response: The college will remain keenly aware of the higher education landscape in which it exists and use its influence to promote equity-minded education. It will position itself to take advantage of, rather than be subject to, the shifts within the California Community Colleges system and the regulatory structure under which it operates. ARC will further develop its capacity to advocate and coordinate effectively in order to accomplish its mission. It will seek new ways of collaborating with its sister colleges in order to become a more nimble district and develop a unified voice with which to promote shared interests. Recognizing the evolving nature of its environment, ARC will nurture ongoing relationships with external stakeholders to understand the changes that are most likely to occur in the region and how ARC needs to adapt. It will amplify its existing partnerships with K-12 districts, universities, and other agencies.

Planning Process

This plan, and its guiding imperatives, were developed through a collaborative process. A project team was authorized by the Executive Leadership Team (ELT) during Spring 2019 and the membership quickly began to glean insights from existing research. Early in the fall semester, the entire college community was asked to contribute ideas and perspectives. Input was gathered through a variety of in-person events and virtual crowdsourcing campaigns:

- August 5, 2019: Executive Leadership Team retreat dialogue (*college and governance leaders*)
- August 15, 2019: Administrative Leadership Council retreat dialogue (*administrators and supervisors*)
- August 23, 2019: Flex Day open exhibit and facilitated dialogue (*all employees*)
- August 15-October 16, 2019: Virtual idea collaboration (*all employees*)
- September 3, 2019: Student Success Council dialogue (*SSC members*)
- September 10-20, 2019: Virtual idea challenge (*all students*)



During fall 2019, the project team met regularly to discuss research, consider input gathered from college stakeholders, and share their perspectives on how to best prepare the college for the future. These conversations led to the creation of a plan designed to serve as a relevant and flexible navigational tool.

In November 2019, the draft plan was posted for campus-wide feedback as well as being routed through the Academic Senate, Classified Senate, and Associated Student Body.

The final draft was presented to the Student Success Council before making its way to the Executive Leadership Team for consideration. Special thanks to the project team for their invaluable contributions that shaped the content of the plan.

Project Team

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Where the Journey Began

Over the last few years, American River College has been devoted to a redesign effort that fundamentally challenges past practice and strives to transform the institution so that it can achieve its vision not by chance, but by design. Four new strategic goals were adopted in 2017 and an intentional emphasis was placed on creating a more inclusive and equitable educational environment. The governance structure was updated to cultivate a dynamic and action-oriented way of working together that is already demonstrating tangible results. While progress has been substantial, there remains a focused determination to advance.



STRATEGIC GOALS 2017-2021

STUDENTS FIRST - The College engages and connects students early and often to people, programs, and services as an integrated educational experience. By providing personalized, proactive support, the College fosters relationships that ensure all students, particularly the historically underserved and marginalized, persist, learn, and succeed.

CLEAR AND EFFECTIVE PATHS - The College provides easily recognizable pathways to, through, and beyond ARC. Offering well defined and supported pathways provides a foundation for success as students enter the College, make timely progress toward achieving their informed educational goals, and seamlessly transfer to other colleges and universities or find employment in their chosen career.

EXEMPLARY TEACHING, LEARNING & WORKING ENVIRONMENT - The College ensures an equitable, safe, and inclusive teaching, learning, and working environment. Culturally relevant curriculum, innovative, high- quality instructional methods and technologies, exemplary academic and student support services, and comprehensive and integrated professional development create the best conditions for teaching and learning. The College promotes liberation and honors the dignity, humanity, and contributions of all members of our community.

VIBRANCY AND RESILIENCY - The College promotes a culture of innovation, entrepreneurship, sustainability, and transparent communication. Proactive, effective, and efficient operational systems and governance and data-informed approaches to planning, decision-making, and resource allocation provide a high level of service to our students, community, and to one another.

ARC has not only looked internally, but also recognizes that there are many disruptive signals coming from the external environment. Two of these signals emerged from the California Legislature in 2018 in the form of a new, performance-based funding formula for the California Community College System and the establishment of the first fully online community college that is competency-based and specifically targeted at working learners. Both of these changes indicate that the status quo within California has shifted dramatically. Simultaneously, technological advancements such as artificial intelligence and automation are disrupting the future of work and learning. It is within this context that ARC began its educational master planning process and quickly determined that the college should rally around a set of compelling imperatives rather than a list of prescriptive actions.

Guiding Imperatives for the Route We Travel

As ARC looks towards the future, the assumptions below form the framework for the imperatives:

- Imperatives are the **key priorities** upon which ARC will focus between 2020-2031
- Imperatives can effectively work in conjunction with ARC's existing strategic goals as well as future strategic goals that support the college mission
- Imperatives will be guided by the Institutional Equity Plan as defined in the ARC Integrated Planning Guide
- Imperatives must be future-thinking, flexible, relevant, and attuned to opportunity
- Imperatives recognize the exponential impact of technology on education and employment
- Each imperative includes a specified response that is within ARC's scope of influence
- Each imperative is likely to require an investment of time and resources to effectively address the response

Imperative 1: Close the Opportunity Gap

Summary Observation: A substantial opportunity gap exists for students of color and other historically underserved groups that inhibits their educational access, achievement, persistence, and completion. Barriers to educational attainment further intensify existing socio-economic inequities. Many students face daunting hurdles such as homelessness and food insecurity that inhibit goal achievement. ARC is already moving in a direction to close the opportunity gap through its commitment to social justice and equity as well as actions supporting the strategic goals of “Students First” and “Clear and Effective Paths”.

As California becomes increasingly diverse, there is an escalating sense of urgency to improve student outcomes, reduce time to completion, and eliminate opportunity gaps of historically underserved populations. Over the last few years, concerns over inequities have resulted in a variety of legislative mandates including AB 705 and similar reforms. Meanwhile, the System Office of the California Community Colleges has set a system-wide goal of eliminating equity gaps across a limited set of achievement metrics by 2027 (i.e., ten years from publication of the Vision for Success).

Until recently, ARC struggled to significantly improve metrics that indicated inequitable achievement despite tireless employee efforts. Of particular concern are the stark equity gaps in success and completion rates of African-American and Hispanic students. As an example, there was a 22% disparity between the groups with the lowest course success rate (African-American) and highest course success rate (Filipino) in Fall 2014¹.

According to the Community College Research Center at Columbia University, guided pathway reforms are intentionally designed to break down the barriers at community colleges but only if accompanied by fundamental changes in institutional culture.² Through its work with the ARC Redesign and as one of twenty colleges participating in the California Guided Pathways Project, ARC has built the necessary foundation to positively impact its student population. This foundation was reinforced in 2019 when it adopted an Institutional Equity Plan that identified seven categories for action that, once actualized, will contribute to a more equitable learning and working environment. These efforts, along with many others, indicate a college-wide dedication to take meaningful action.

One example of recent progress is the Achieve at ARC program. This onboarding experience was intentionally designed to ensure that first-time college students have a successful transition to college. It uses a case management model to create connections, offer consistent communication, and foster proactive academic engagement. Initial data for the Fall 2018 cohort showed promising results among disproportionately impacted groups. While this pocket of success is encouraging, much more is needed to close the opportunity gap.

EARLY INDICATORS: AFRICAN-AMERICAN STUDENTS³

Fall 2018 Cohort	Non-ACHIEVE	ACHIEVE
First Term Success Rate	48%	66%
<i>Full-time only</i>	58%	65%
<i>Part-time only</i>	38%	67%
Second Term Success Rate	50%	68%
15 Units by End of 1st Term	9%	13%
Fall-to Spring Retention	61%	81%
Drop Rate	20%	10%

EARLY INDICATORS: HISPANIC STUDENTS⁴

Fall 2018 Cohort	Non-ACHIEVE	ACHIEVE
First Term Success Rate	58%	65%
<i>Full-time only</i>	62%	69%
<i>Part-time only</i>	53%	55%
Second Term Success Rate	61%	66%
15 Units by End of 1st Term	5%	12%
Fall-to Spring Retention	63%	82%
Drop Rate	16%	12%



Efforts to improve educational attainment must consider not only how the existing student population is being served, but whether access is being provided throughout the community. With the exception of North Natomas and North Highlands, ARC’s service area is not expected to experience significant population growth through 2035⁵. Nonetheless, there is potential to better serve the community by expanding the college’s reach to penetrate areas and populations that are not currently well served.

While the Los Rios Promise Program covers enrollment fees for eligible first-time students, less obvious economic barriers often keep students from enrolling and fully participating in college. Rising textbook costs are a frequent challenge for students with limited financial resources. The digital divide is another deterrent due to inequitable access to computers and the Internet. While often highlighted as a hindrance to online education, the digital divide also limits the ability of other students to complete assignments, access course materials, and connect with self-service options outside of college business hours. As education becomes more technology-enabled, the impact of the digital divide becomes even more challenging for students who do not have those technologies that are assumed to be readily available.

Economic barriers run much deeper than textbooks and computers. The reality is that the college serves as both a safety net and community resource for individuals facing homelessness, food insecurity, and other insufficiencies. Like much of California, Sacramento has a growing homeless population due to the lack of affordable housing and other factors. Estimates by faculty researchers from California State University, Sacramento and the Institute for Social Research indicate a 19% relative increase in the homeless population over the last two years with up to 11,000 residents of Sacramento County projected to experience homelessness in 2019.⁶ A survey of community college students within California paints a similarly alarming picture with 70% of respondents reporting that they had experienced homelessness, housing insecurity, or food insecurity in the prior year with disparities based on gender, age, race/ethnicity, and a variety of other factors.⁷ Academic progress and completion is particularly daunting when there is a lack of sufficient resources to meet a student’s most basic needs.

Providing immediate assistance is crucial, but more holistic approaches are necessary to overcome underlying causes and move households from dependency to self-sufficiency. This issue was highlighted in the ARC Institutional Equity Plan which recommended that the college “plan to strategically and comprehensively meet basic needs for all students.” Like many community colleges, ARC distributes food periodically, provides health services, and other supports through various programs. However, there is frequent advocacy for colleges to do more. Some community colleges have designed comprehensive methods to facilitate access to public benefits in tandem with financial literacy and other services intended to move the student towards financial sustainability. A study of five participating community colleges using different models found that academic progress is positively impacted by these programs and that persistence increases among students who are receiving benefits.⁸ While certain programs focused solely on the student population, others were open to families and members of the local community.

Amongst all these concerns, there is also a growing tension between the haves and have nots that operates within the complexities of political, racial, and social divides. Higher education sits in a pivotal position to influence how society conducts itself as it copes with deep anxieties about the future and grapples with a range of conflicting human interactions.

ARC Response

Holistically, ARC will close the opportunity gap across all stages of the student lifecycle by 2031. The college will continue its existing redesign efforts and will demonstrate measurable improvement in outcomes for historically underserved students. Beginning with its guided pathways implementation, it will progressively refine its programs and services to create an equitable learning environment and eradicate systemic barriers to academic achievement. These efforts will build upon early indicators of success and have an even greater impact as the college applies a more comprehensive approach to closing the opportunity gap.

ARC will also work towards implementing the recommendations of the Institutional Equity Plan in order to create a more equitable and inclusive institution. Through methods such as open educational resources, it will equip each student with the materials and technologies that enable learning. ARC will seek growth by expanding its reach to areas and populations that have not been fully served in the past. It will increase dual enrollment opportunities for marginalized populations and employ creative methods (e.g., ARC mobile simulation lab) to bring instruction outside of the campus. Additionally, it will build awareness among underserved communities through marketing and outreach.

ARC will respond to the unique role of the community college by ensuring that its students have access not only to education, but to the basic life necessities that are a prerequisite to participation. It will seek holistic strategies that enable academic progress and move households towards self-sufficiency. Employees and students will model and teach the unifying values of trust, compassion, empathy, kindness, and respect for humanity in order to create a campus culture that upholds the dignity of every person.

While this imperative aligns directly to the system-wide priorities of the Vision for Success, it extends the equity perspective by examining ARC's effectiveness across the entire student experience. While a variety of metrics can be used to discern whether it is successful in its efforts, some key questions to consider are:

- Access: Does the applicant pool as well as the student population reflect the demographics of the community that ARC serves both college-wide and within each area of interest?
- Entry: Does the onboarding process result in equitable pathway entry and successful completion of the first term?
- Progress: Does the college provide an equitable learning environment that enables all students to persist and achieve milestones appropriate to their educational goals?
- Completion: Do ARC certificate and degree awards demonstrate equitable outcomes?
- Transition: Are students transitioning to employment or transferring to universities in an equitable manner?

By measuring its impact and refining its practices, ARC will realize its strategic goal of ensuring that all students, particularly the historically underserved and marginalized, persist, learn, and succeed.

Capacity to Respond (Resource Considerations)

ARC has already allocated substantial resources to its implementation of equity-focused activities. Examples include the Achieve program, success-oriented project teams, and new/reallocated positions designed to promote equitable outcomes. Additional resources may be needed to build out its guided pathways implementation, maintain case management and scheduling technologies, and retool practices that currently present barriers to students from underserved populations. The college should continue to plan for and invest resources in equity-minded initiatives through funding available from the integrated Student Equity and Achievement (SEA) program and other sources.

Additional resources may be needed for professional development to support this work.

Example Strategies: Imperative 1

- Dual enrollment
- Marketing and outreach to underserved communities
- Launch of pathway communities
- Actualization of the Institutional Equity Plan recommendations
- Data-informed efforts to close gaps at the program and course level
- Open-educational resources
- Community partnerships
- Bundled services that support economic self-sufficiency

Imperative 2: Prepare Students for an Ever-Changing Landscape of Work

Summary Observation: *Rapid technological advances are transforming the world of work. It is likely that many cognitive, service, and manual tasks (rather than entire jobs) will be automated in the future as artificial intelligence and advanced robotics become ubiquitous. The linear trajectory of education as preparation for a single career is no longer the norm. The self-employed workforce is growing as individuals elect, by choice or necessity, to engage in independent short-term gigs. The age range of the workforce is expanding and there is an increased demand for upskilling, reskilling, and learning across a lifetime.*

The latest transformation of the workforce has been termed the fourth industrial revolution and is expected to be a major societal transition point. While recent headlines may seem provocative, history clearly demonstrates that the world of work is constantly evolving. In this latest iteration, technological expansion is profusely altering how people live, learn, work, and relate to each other. The combined use of disruptive technologies such as advanced robotics, artificial intelligence, and the Internet of Things (IoT) is already powering many tasks that have traditionally been done by people. Automation is surfacing across various industries in which robots and humans are becoming co-workers, using their combined skills to produce materials and provide services. Although the actual number of jobs at risk is far from clear, one recent study estimated that 30% of work activities (i.e., tasks not jobs) will be automated by 2030.⁹ But much like the preceding industrial revolutions, this transition can anticipate not only job elimination but also job creation. In this new reality, there will be a strong need for training in emerging technologies as well as reskilling of the existing work force as cognitive, service, and manual tasks are increasingly automated. Research suggests as many as 50 million new technology jobs may be required by the end of the next decade and it can be assumed that most workers will need some level of technology proficiency.¹⁰ Digital fluency will become a new form of basic skill and incumbent employees who were previously trained in obsolete technologies will need retraining.

The norms in terms of the employment trajectory have also shifted. In the past, individuals expected a linear path from high school to college to career to retirement. The college degree signified that subject matter knowledge had been obtained specific to the industry in which the career would occur and the workforce tended to value employment stability within a single industry. The shelf life of knowledge is now decreasingly rapidly in an information age and younger generations appear more willing to switch jobs frequently in search of better opportunities.

According to the U.S. Bureau of Labor Statistics, the share of older workers is increasing and is projected to reach 25% of the working population by 2024.¹¹ Many will be self-employed which is another trend across various age ranges. As much as 30% of the working population is estimated to be engaged in independent work in which they have a high degree autonomy, variable income, and short-term relationships with clients.¹² The growth of fluid work arrangements suggests that individuals may need alternatives to employer-based professional development as well as greater entrepreneurial acumen, small business expertise, accelerated learning paths to expand skill sets, networks to connect to freelance opportunities, and portable credentials by which skill sets can be quickly verified.

Yet another role for the community college is to help level out the expected inequities of worker displacement and foster economic mobility. According to a 2016 report by the Obama administration, “research consistently finds that the jobs that are threatened by automation are highly concentrated among lower-paid, lower-skilled, and less-educated workers. This means that automation will continue to put downward pressure on demand for this group, putting downward pressure on wages and upward pressure on inequality” (p. 2).¹³ Colleges can help mitigate this threat through accelerated programs that rapidly reskill workers for placement into higher paying jobs with lower risk of future displacement.

ARC Response

Across its programs, the college will offer a wide range of opportunities for rapid reskilling and skill advancement to support individuals as they navigate career transitions, self-employment, and an increasingly technology-enabled workplace. Structurally, these opportunities will be packaged to provide clear pathways to employment as well as frequent routes to learning across a lifetime in order to mirror the expected trajectory of the workforce. Continuous learning will be promoted not only for personal growth, but as a means to remain employable. The relationships that ARC is building with its students through its redesign work will become the substance for an ongoing partnership in fulfilling their learning needs as they navigate a future of multiple careers. ARC will connect coursework across disciplines to create learning paths that are not necessarily specific to an industry, but prepare students to be successful entrepreneurs with the acumen to communicate their products and skills through digital platforms.

ARC will nurture basic digital fluency among all students, as well as offering technical training in emerging technologies. Students may acquire digital literacy through the curriculum, but will also be aided through orientation activities, interactions with student support personnel, and other ways of learning in the moment. ARC will keep its pulse on technological advancements and be quick to respond with relevant training options that rival the high-tech programs and marketing prowess of for-profit learning providers. Recognizing that the college workforce is not immune from technological disruption, ARC management will encourage and enable employees to participate in learning opportunities that build their knowledge, skills, and abilities.

Emphasis will be given to mitigating inequities in worker displacement by providing a path to re-employment in fields with a median living wage. Existing wage levels as well as the future job outlook must be considered and constantly monitored to ensure that displaced workers are channeled towards paths in which employment will exist for years to come. By intentionally guiding individuals to make strategic career choices, the college can offer hope of a better future while also serving as a guardian against a vicious cycle of reoccurring displacement.

Capacity to Respond (Resource Considerations)

In order for a college to promote digital fluency and prepare students for technology-enabled environments, it must continuously invest in its own technology and the technology proficiency of its employees. It is likely that existing resources may need to be redeployed as demand for some types of training becomes obsolete and other training needs emerge, particularly in high-tech and advanced industries. Additional instructors may be needed who have expertise in emerging technologies. Staffing may require reconfiguration to support different programs, partnerships, and services. Additional resources may be needed to market programmatic offerings, monitor the job outlook, and provide assistance with transitions from education to employment.

Example Strategies: Imperative 2

- Fast-track reskilling programs
- Digital fluency across the curriculum
- Business skill development for independent workers
- Community partnerships to identify displaced workers
- Job placement assistance
- Alternate delivery methods
- Expanded career services

Imperative 3: Integrate Essential Skills

Summary Observation: *Exposure to broad knowledge develops essential skills such as critical thinking, creativity, communication, ethics, and social responsibility that translate across all aspects of work and life. In a rapidly changing environment, these skills hold particular value by providing a frame for considering challenging ideas and conflicting information. While it is undeniable that these skills are vitally important, they have traditionally been acquired through a liberal education which is offered to those seeking a degree path. These skills need to be more fully integrated and packaged in different ways to influence individuals who are electing to pursue short-term learning or skill building.*

As the labor market changes and society becomes increasingly complex, one question to ponder is how institutions can adequately prepare students for jobs that don't exist yet and that will use technologies that are yet to be invented. Another line of inquiry is how to develop students to adapt to frequent job changes as well as coping with the anxieties of modern life. While there is much debate about what the future holds, there is an undeniably consistent thread of essential skills that experts highlight as the key to navigating the future. Beyond technical expertise, tomorrow's students will need higher-level cognitive and social skills, as well as the uniquely human skills of creativity, empathy, ethics, and cultural agility.¹⁴ These will be the essential skills for all employment (rather than a specific job) that are reliably transferable across contexts as individuals change occupations or life roles.

In this information age, individuals are exposed to a massive volume of messages that are often incomplete, conflicting, biased, or politically motivated. The expansion of media sources, including social media, has drastically increased the quantity of information, but not necessarily its quality. Information literacy, as well as critical thinking, are necessary to filter content for credibility and form accurate perceptions.

Within higher education circles, it may seem obvious that the aforementioned skills are frequently developed through exposure to the broad knowledge that is typically associated with a liberal education and intrinsically tied to the general education requirements that accompany degree completion. Even those outside of academia have begun looking towards liberal education as a tangible solution to ambiguity and technological disruption.¹⁵ While a compelling strategy, this line of thinking also presents a remarkable challenge in that many students are now opting for learning alternatives that do not follow a degree path. For these individuals, educational pursuits will not necessarily result in acquisition of the essential skills that general education develops. Community colleges must now wrestle with how to effectively build those skills by infusing a liberal education not only within the associate degree, but across short-term offerings and other learning endeavors so that it becomes interwoven and cumulative for all students.

A primary consideration is the historical dichotomy between transfer-focused (academic) and career-focused (technical) disciplines. Research from the National Academies of Sciences, Engineering, and Medicine suggests that this gap must be bridged because students need a well-integrated blend of technical, practical, and soft skills to not only be effective on the job, but to successfully navigate career changes.¹⁶ Efforts to converge the academic and technical sides of education could also address inequities embedded in the history of vocational education in which socio-economic class structures tended to steer students from low-income and minority backgrounds towards occupational training rather than the liberal arts. Expanding access to experiences that build capacity for critical thinking, communication, creativity, and other essential skills will not only benefit individual students as they apply their talents in real-world settings, but will enrich the community by developing an educated citizenry that is prepared for civic responsibility.

ARC Response

The college will empower future students by developing well-rounded, resilient individuals who possess a practical blend of technical and soft skills that can be applied throughout life. It will enrich its community by extending the liberal education beyond traditional general education requirements. As stated in its mission, it will inspire critical thinking as well as responsible participation in the community.

Creative methods will be utilized to expose all students, irrespective of program length, to experiences that develop essential skills throughout ARC's educational programs, services, environment, and co-curricular activities. These experiences may be distributed across the curriculum as well as embedded through events, speakers, student support offerings, and other connections. The physical and virtual environments will also be leveraged to consistently expose students to a wealth of cultural experiences, diverse viewpoints, literary references, art exhibits, scientific knowledge, and other aspects that broaden individual awareness of the world in which they exist.

Intentional efforts will be made to bond career education and liberal education by fostering better curricular integration and faculty interaction. ARC will explore how these efforts might be supported through changes in organizational structure, facility usage, and institutional practices that are designed to promote greater collaboration.

Recognizing that a liberal education provides the context for sifting through the expanding volume of information, ARC will also emphasize information literacy to enhance the ability to discern fact from fiction while considering media influences and other similar factors. It will ensure that all students, regardless of socio-economic background, are encouraged to grow and expand their capacity to contend with ambiguity, complexity, diversity, and change.

Capacity to Respond (Resource Considerations)

In order to realize this imperative, concerted effort must be applied to confront the ivory tower approach to a liberal education and alter the status quo. Resources are likely to be needed to reconstruct how liberal education is packaged and delivered in both explicit and implicit ways. This imperative will require a synergy of efforts that are strategically deployed across the entire institution. One possibility would be to task a project team to consider the imperative and bring forward recommendations for a comprehensive approach including recommended resources. Central to any approach should be professional development that supports individuals who are interested in integrating content across technical and academic disciplines.

Example Strategies: Imperative 3

- Faculty collaboration across the technical and academic disciplines
- Integrative methods of various apprenticeship models
- Professional development that promotes infusion of historical and cultural context across disciplines
- Coaching students to promote self-advocacy and civic involvement

Imperative 4: Tailor Experiences to the Individual (Student-Centric)

Summary Observation: *Students enter college with a variety of life experiences, challenges, aptitudes, skill sets, and goals. The working learner or re-entry student may have very different priorities from the incoming freshman who is a digital native or the former foster youth who is the first generation to attend college. Standardized (one-size-fits-all) experiences fail to meet the needs of today's learners. Students expect educational institutions to provide flexible learning options and personalized digital experiences that are similar to those received through consumer technologies. Traditional educational models are institution-centric by design.*

Higher education, which once held a monopoly on knowledge acquisition, is now only one of many vehicles by which individuals can learn and attain verifiable credentials. Students are increasingly seeking accelerated models of education paired with flexibility so that learning opportunities fit their life, rather than trying to arrange life around a semester-based college schedule. With a median student age of 25 years¹⁷, ARC serves an older population than the other colleges in the district. Many of these individuals are working learners and non-traditional students who are juggling a variety of life circumstances that compete for their time. Although community colleges are often described as open access institutions, access remains limited on a practical level by an assortment of rigid institutional constraints such as admission cycles, academic terms, and course schedules. A true commitment to access suggests the capability to not only attend classes on campus, but to learn effectively anytime, anywhere, via any device that a student elects to use.

Through its redesign, ARC has pivoted away from a standardized assembly-line approach to education and thoughtfully determined to meet students where they are when they approach the college. In practice, this requires a recognition that most of ARC's students do not fit a traditional mold and that experiences need to be tailored to a wide range of individual circumstances. Students expect, and can easily find elsewhere, a variety of flexible learning options supplemented by data-informed personalization and non-traditional schedules to suit individual needs. Tailoring the experience begins with personalization that recognizes the individual and offers relevant, timely communication based on analytics and a holistic view of the student. The generic form letters of the past would be replaced by focused messages based on individual goals, progress, and needs that accommodate unusual conditions and connect to meaningful supports.

Within the California Community Colleges, on-campus and online options often look very similar in terms of academic calendars and scheduled offerings. For many prospective students, the lengthy gap between semester start dates poses a significant barrier to access due to the limited number of entry points. Other educational providers have broken through this barrier by segmenting the semester with flexible start dates, offering open-entry courses, or eliminating terms entirely. One example is Odessa Community College in Texas that transitioned the majority of its offerings to eight-week sessions in 2014 and has experienced growth in both enrollments and completion rates.¹⁸

The standard peak hour scheduling of classes can also be a barrier for those juggling work commitments. As online education grows, there is also an increased demand for colleges to have expanded self-service options and extended hours for student services to support individuals who participate during evenings and weekends.

Alternate credentials also have a role to play in a tailored experience. The debundling of education combined with a digital environment, evolving employer needs, and a multitude of learning options have changed the credentialing landscape. Prior learning assessment can reduce time to completion, while micro-credentials (e.g., badges) recognize learning more quickly and at a more granular level than the degree. Unlike transcripts that supply information in academic terminology (courses and degrees), a digital badge specifies skills and competencies that can translate to the workplace and allow students to showcase their abilities more easily to employers and clients. Institutions such as Central New Mexico Community College are also forging the path forward with digital diplomas powered by Blockchain that transfer the role of record custodian to students who are able to grant access to their own records without the institution as an intermediary.¹⁹

ARC Response

The college experience will be tailored to fit the student, rather than expecting the student to fit into a standardized higher education model. Access to equitable education will be expanded by increasing flexibility and reducing institutional constraints.

ARC will disrupt the academic calendar and eliminate barriers to enrollment by providing a viable option that is attractive and accessible to a variety of non-traditional students. Among others, it will design for the working learner and offer a high-quality, low-cost alternative to other educational providers. It will ensure that its programs and services offer frequent opportunities to enter the path to learning.

Through a robust blend of human interaction and technological tools, ARC will extend a level of personalization that recognizes students as individuals, facilitates exploration of options, and inspires them towards goal completion. By utilizing methods such as accelerated programs, frequent start dates, and flexible scheduling, it will level the playing field to ensure that students are well served.

Employees will boldly innovate and experiment across instruction, student services, and operations in a quest to better support non-traditional learners through methods such as alternate (non-peak) course schedules, extended service hours, automated self-service, and digital credentials.

Capacity to Respond (Resource Considerations)

Through its redesign work, ARC has already begun to invest in personalized, relationship-based services. However, additional resources will be necessary to fully convert from standardized to tailored options. Disruption of the academic calendar will require significant planning to ensure that sufficient sections and instructional capacity is available to meet demand. Planning will also be needed in non-instructional areas because the variation in course schedules will change the timing of student volume across a variety of services and systems. Additional staffing capacity may be needed to extend service hours and manage the labor-intensive nature of PeopleSoft processes for non-traditional scheduling. Los Rios is currently implementing technologies (Hobsons and HighPoint products) that are expected to provide some new tools that could support personalized service, but the full scope of functionality is unknown. Additional technologies such as a Customer Relationship Management (CRM) system may be necessary to bridge gaps and enable personalized communication from the point of first contact. Training and professional development may also be needed during the transition.

Example Strategies: Imperative 4

- Predominantly 8-week scheduling
- Accelerated pathways
- Replication of Natomas ACE program at other venues
- Extended support hours and/or self-service
- Micro-credentials (e.g., badges)
- Technology-enabled personalization
- Prior learning assessment

Imperative 5: Strengthen Connections to Employers

Summary Observation: *Regional and local employers report a lack of skilled employment candidates and are also seeking expanded development opportunities for incumbent workers. However, existing college practices and curriculum processes lack the agility to proactively feed the labor pipeline and respond to immediate training needs. Opportunities exist to strengthen connections in order to become the preferred training provider for various agencies and employers, but only if ARC bridges the expanse between what employers need and how colleges tend to operate.*

Advancing California’s economic growth and global competitiveness through continuous improvement of the workforce is a primary mission of the California Community Colleges [EDC §66010.4]. This mission can only be fulfilled if community colleges actively engage with employers and proactively prepare workers to meet future workforce demand. According to the Public Policy Institute of California, middle skill jobs currently comprise one-third of jobs in California and are expected to continue at this level. It notes the importance of the community college in training individuals for these jobs as well providing transfer pathways to jobs requiring a bachelor’s degree.²⁰

Yet public higher education, and particularly curriculum processes, are often viewed as moving at a glacial pace that is not sufficiently responsive to the needs of employers. As a result, many employers are looking to for-profit providers or building their own internal training programs. Commenting on Amazon’s investment in internal employee training, a recent article observed “Gone are the days of higher learning institutions operating in separate silos from employers. The blending of education and work ... will intensify, and higher learning institutions that are nimble and innovative enough to adapt to a fast-changing economy and work force will be able to keep pace.”²¹

A recent literature review prepared by the Centers of Excellence for Labor Market Research highlighted an even greater need for interaction with employers in light of the potential impact of automation and artificial intelligence. The report recommended partnering with industry to shape curricular training programs; providing training programs of differing lengths to support reskilling and short-term training goals; and developing more flexible online learning systems.²²

But the true dilemma is whether higher education institutions can engage with employers and move quickly enough to produce the workers that they need. Despite a college’s educational expertise, it can be perceived as an unattractive partner when institutional processes fail to adapt. Another aspect in strengthening connections to employers is to migrate individual efforts into an institution-wide endeavor that goes beyond the advisory committee model to foster solid, interactive partnerships with industry. Particular attention should be given to grooming relationships with government agencies since more than 24% of all jobs in the Sacramento region are in the public sector.²³ Building these partnerships may require a retooling of existing college practices to be both proactive and responsive to employer needs.

Much as the arrival of the subscription-based software as a service market has changed the distribution of software, higher education institutions may need to repackage offerings to provide learning in an on-demand, service-based manner through contract education or other methods to create customized training for incumbent workers. Alternately, institutions can partner with employers to design campus learning environments that more closely reflect industry and provide hands-on practice through apprenticeships, internships, and other work-learn options.

ARC Response

Over the next decade, the college will actively strengthen connections to employers and create a pipeline of skilled employees that are prepared based on current industry specifications as well as projections of emerging industry demands. It will facilitate frequent interaction between employees, industry professionals, and business organizations to ensure that ARC programs are in sync with employer needs.

In order to become the preferred training provider of employers in the region, ARC will minimize institutional barriers that inhibit synergetic partnerships. It will examine its business practices and develop healthy mechanisms for employers to appropriately influence program and curricular design as well as the provision of training. Across its instructional programs, it will utilize work-learn models, simulations, and other methods to ensure that its students acquire and can readily apply real-world knowledge in an employment setting. Through its support services, ARC will work with employers to identify and streamline the enrollment of individuals who would benefit from retraining or skill advancement.

Through strengthened partnerships, it will also help employers identify skilled job candidates from among its students and develop its career services to ensure students successfully transition to living wage employment. Recognizing that the Sacramento region has a high percentage of public employment, ARC will intentionally consider how it can prepare students to navigate the nuances of governmental hiring practices and testing requirements. In alignment with its commitment to equity and social justice, it will work with its employer partners to minimize barriers in the workplace that may inhibit the future employment and success of marginalized populations.

Example Strategies: Imperative 5

- Expedited curriculum processes
- Working-learning models
- Reskilling of workers on site (on-the-job training)
- Job placement/talent acquisition
- Interaction with industry professionals
- Innovative facilities that replicate workplace settings
- Alumni connections within industry

Capacity to Respond (Resource Considerations)

A variety of resources will be needed to strengthen connections to employers and develop partnerships that are woven through the entire institution. Past practice has been based on regulatory requirements (e.g., advisory committees) or individual efforts that resulted in pockets of employer interaction rather than sustained connections across the institution. Better coordination will be necessary to intentionally connect with employers on an ongoing basis. Financial resources may be needed for participation in industry organizations and events as well as to further develop career services across pathways. As strong connections emerge, ARC may find that investment in facilities and equipment would be beneficial to respond to employer interests.

Imperative 6: Stimulate Exemplary Teaching and Learning

Summary Observation: *The future of learning is expected to be substantially different from the traditional classroom model based on seat time. There is a growing demand for efficient, contextualized, simulated, and experiential learning. Technological innovations offer the prospect to expand the learning environment with immersive experiences and interactive methods that can assist students to quickly grasp and apply knowledge. Simultaneously, the college must contend with the ideal balance between human interaction and absolute reliance on technology.*

An academically rich, inclusive educational environment is a tenet of American River College’s mission that requires ongoing diligence to avoid stagnation. As the marketplace for education becomes increasingly competitive, many institutions are stimulating the exploration of new delivery methods, teaching strategies, and technological tools to remain relevant to future students and ensure they receive high-quality learning experiences.

The first trend to consider is the blending of physical and virtual worlds in ways that turn learning into a seamless, interactive experience. Virtual and augmented reality is being used by numerous institutions, including the California State University system, to not only transfer knowledge but immerse students in the context in which the knowledge would be used.²⁴ These technologies have a wide range of applications and have successfully conveyed topics such as anatomy, art history, emergency response, and the mechanics of engines in a three-dimensional format.

Educational institutions are also utilizing experiential and project-based learning to actively integrate theory and practice so that students are better prepared to apply what they learn in real-world settings. Project-based learning is an inquiry-based method that is often linked to inspiring greater student engagement and building essential skills such as critical thinking as students co-construct knowledge.²⁵

Modular instruction that unpacks curriculum is another potential way to meet the demand for alternatives to the full-term course. Individuals are seeking ways to quickly acquire specific skills and to participate in shorter chunks that provide learning at the time that it is needed. For these students, sequentially ordered courses and programs hold limited appeal due to the investment of time that is required compared to the skill that is being sought. Modular instruction that uses interchangeable instructional components is one possible strategy to meet this demand for customized learning while also inviting students to engage in additional modules that build towards completion of a course or certification.

New frontiers in learning may also involve non-linear, accelerated formats such as competency-based education (CBE) in which semesters and seat time are replaced by a demonstration of competencies (skills, knowledge, and abilities).²⁶ While this format is sometimes presented as an institution-wide “all or nothing” proposition, quite a few community colleges are strategically using CBE in a more focused manner for acceleration of specific programs designed for non-traditional learners.²⁷ Because it is agnostic to the source by which learning is acquired, it permits quicker progression for those with substantial life experience. Research also contends that competency-based education holds promise in combatting inequities through intentional design that prioritizes students of color, underemployed adults, and others who may struggle within the inflexible confines of traditional programs.²⁸

Irrefutably, exemplary teaching and learning is contingent upon more than innovation in the pursuit of excellence. It requires an ongoing commitment for instructional and non-instructional faculty to be meticulous scholars who continuously build subject matter expertise, remain current in their chosen field, and rigorously reflect upon their effectiveness as educators.

ARC Response

Faculty, across instructional and non-instructional roles, will be encouraged to stay at the forefront of their craft by expanding subject matter expertise as well as exploring learning science, emerging technologies, and other frontiers that have the potential to progressively develop educational quality. The college will stimulate exemplary teaching and learning by embracing a forward-thinking approach to how it delivers education and providing resources that enable the use of modern methods. ARC will facilitate different types of learning by applying a variety of techniques such as virtual reality, simulation-based learning, integrative real-world projects, interdisciplinary collaboration, modular delivery, and experiential models.

As it strives for excellence, ARC will push the boundaries to foster equitable and engaging education. It will expand the use of culturally relevant curriculum and universal design practices as well as considering how competency-based education and other alternatives might be used to benefit historically underserved and marginalized populations.

ARC will consider human roles and how to best balance the unique value of personal interaction with the ever-expanding wealth of technological tools. It will recognize the inherent barriers to pioneering new methods and establish an environment that facilitates ongoing innovation.

The physical and virtual classroom will be reimagined so that it is ideally suited to the application of new methods and promotes collaborative interaction. These classrooms will be learning-ready spaces that equitably support a wide variety of instructors and students through functionality, accessibility, and ease of use.

Capacity to Respond (Resource Considerations)

In order for faculty to explore and utilize innovative methods, a substantial investment in technology and professional development will be needed. Utilizing non-traditional forms of delivery such as competency-based education would also require an initial investment of personnel resources to research, construct the infrastructure, and deploy the methods. Ongoing training can support instructors as they hone the craft of teaching and enable staff to provide support for new technologies and learning methods. Reimagining the classroom environment may require resources for furnishings, equipment, or virtual components.

Example Strategies: Imperative 6

- Virtual reality
- Competency-based education
- Modular, just-in-time instruction
- Project-based integration of theory and practice
- Classroom design
- Expansion of online education
- Artificial intelligence and machine learning
- Experiential learning (e.g., design hub model)

Imperative 7: Adapt the Physical Campus

Summary Observation: *External factors, such as the growth of online education, are signaling that the role of the physical campus may change and that space is likely to be used in different ways. Campuses are being redeveloped as gathering spaces for collaboration, community-building, and experiential learning. As self-service options grow, students are less likely to approach campus to transact business and seek information, but facilities will remain vital as an access point for services, discipline-specific equipment, and cutting-edge technology.*

As the future of learning develops, institutions must also consider the role that a physical campus should play in the coming decades. Some suggest that brick and mortar will become obsolete, but it is more likely that the role of the campus will evolve to balance the interests of on-campus and online learners. One possibility is to develop the campus into a vibrant hub that engages its community, extends access, fosters equity, and serves as a model of sustainability. Rather than a place to go to consume knowledge, the physical campus would become similar to a flipped classroom in which current and former students are drawn to the location by the interactions, experiences, and benefits that it offers.

One reality that makes the physical campus vital is that few students or employees have the financial resources to supply the wide variety of high-tech tools, studio spaces, laboratory apparatus, green spaces (e.g., botanical specimens), and industry-level equipment that an educational institution can offer. Students may also lack connections to employers, public services, transfer institutions, and community organizations that can be brought together in a campus environment. The physical campus can fill this void by becoming the nexus by which current and former students engage with people, technology, equipment, and organizations. Approaches such as shared work environments, makerspaces, collaborative meeting spaces, and co-located agencies can also be used to facilitate valuable interactions.

The physical campus can advance equity efforts by providing appropriate venues for experiences that expand global knowledge and contribute diverse perspectives. Based on guidance from the Institutional Equity Plan, there are opportunities to adapt the physical campus to be more inclusive and enhance students' ability to succeed. Specific recommendations for the physical environment included:

- Improve physical space to promote success for people with disabilities by modifying buildings, pathways, signs, and infrastructure
- Equip classrooms with flexible seating configurations in order to improve learning experiences for students with disabilities and non-traditional learners
- Foster a more welcoming and safe physical environment for transgender and non-binary people
- Dedicate more space to supporting marginalized students
- Adapt the physical environment to better support student parents (e.g., creating child-friendly study spaces)

Likewise, ARC recently completed development of a Facilities Master Plan that sets specific priorities through 2035. The plan included a number of recommendations for the development and modernization of physical resources including anticipated capital projects. One observation that has particular relevance for adapting the campus environment is that ARC would be prudent to “create highly flexible spaces...to accommodate changing needs over time.”

Another factor of adapting the physical campus is developing its infrastructure to support the increasing demand for technology. Institutions are increasingly adopting advanced technologies and automations to enhance instruction, student service, security, and operations. Virtual instruction, support, and collaboration have steadily become routine which makes an institution more dependent upon its technical infrastructure and power supply. The potential for increased energy consumption suggests a need for more sustainable energy sources. The ARC Facilities Master Plan noted that “future development should focus on productive use of natural resources, technology, and construction methods to

create a living, evolving campus that contributes to the environment and community. ARC should consider environment, economic, and social impacts in planning for a sustainable future.”

Central to any adaptation of the physical campus is how it can improve and simplify the lives of those who will use it. One example of how this user-centered approach can guide adaptation is ensuring that classrooms, offices, and meeting spaces have a consistent technology platform so that individuals can easily utilize the facilities and connect to media (e.g., projectors) from a variety of devices. To further promote ease of use, some institutions are already exploring how emerging technology can be applied to automatically adjust lighting and other equipment based on instructor preferences or discipline-specific requirements.

ARC Response

The college will look to the horizon and evolve the physical campus based on future needs, rather than current realities. It will adapt its facilities to become increasingly technology-enabled recognizing that virtual interaction will occur regularly both inside and outside the classroom. Across all of its locations, it will ensure that students and employees have access to a robust variety of modern technologies, equipment, and learning spaces.

Aligned to the roadmap provided by the Facilities Master Plan, it will construct and modernize facilities while also remaining cognizant of evolving needs. As new possibilities and funding sources emerge, it will make strategic decisions to enhance the vitality of its physical resources.

ARC will vigorously strive to make its facilities more inclusive and accessible. It will respond to the recommendations of the Institutional Equity Plan and continuously seek opportunities for improvement as these recommendations come to fruition. It will use its physical environment to create spaces that invite students to congregate, share ideas, and build community. It will consider how physical space can benefit its students, alumni, and partners as demand shifts towards virtual education and services, while also maintaining awareness of the value of providing a physical point of access and interaction.

ARC will be aspirational as it plans for changes in how the campus will be used by students as well as the increasing technology and energy demands. It will innovate as it modernizes facilities and leverages technology to streamline facility operations and increase ease of use. It will also gravitate towards greater flexibility in space design and heightened environmental stewardship.

Capacity to Respond (Resource Considerations)

The college has a variety of construction and modernization projects planned that will require significant investment. Capital projects, once identified, often go through a lengthy process to qualify for state funding or other resources. Adapting facilities is intrinsically tied to its technology infrastructure in order to enable a variety of technology-mediated experiences. Beyond capital investment, there may also be personnel resources needed to install, maintain, and support facility and technology adaptations.

Example Strategies: Imperative 7

- Virtual interaction in the physical classroom
- Green space for teaching and learning
- Aesthetically pleasing gathering spaces
- On-campus navigation and mobility initiative
- Sustainable energy and energy efficiency measures
- Infrastructure upgrades
- Campus automation

Imperative 8: Achieve Operational Effectiveness

Summary Observation: *Institutional agility is contingent upon strategic transformation of how the college and district operates at the most basic level. Many institutional processes and systems are inefficient by design and have not kept pace with the external environment. The clunkiness of existing practice is a barrier to institutional agility and progress. In many cases, policies and labor-intensive procedures result in frustration and sluggishness. Moreover, antiquated practices regularly act as a major hurdle for marginalized populations that can diminish the likelihood of successful outcomes for both students and employees.*

Operational effectiveness was a reoccurring theme of the input gathered to shape the Educational Master Plan. This input conveyed valid concerns regarding a variety of awkward systems and dysfunctional processes that inhibit employees and students on a day-to-day basis. There is little chance that ARC will be able to accomplish the previous imperatives unless these systems and processes are addressed and fundamentally transformed.

The first area of concern is the lack of progression from archaic business processes to modern practices. One example is the continued use of triplicate forms for routine transactions rather than converting to digital methods. Another is the dependency on postal mail to transfer documents in a physical paper form. The travel authorization process was also referenced as a barrier to professional development because of its requirements to route paperwork for physical signatures across multiple offices. None of these practices rely on efficiencies such as electronic signatures, online forms, and secure document transfer methodologies that speed transactions and minimize physical distance.

Similarly, student processes that have not evolved over the years also require numerous paper forms and wet signatures. Anecdotal evidence indicates that students are sometimes placed in the difficult position of missing work or driving long distances to submit paperwork in person because of inflexible business practices. There is also often an imbalance between the gravity of simple human errors and the multi-step processes required to resolve them. Concerns were also expressed about districtwide systems such as PeopleSoft and Canvas, which can be frustrating for faculty, staff, and students to use. Unintended impacts can also occur due to a lack of coordination across the institution and with outside entities. As input was gathered during the planning process, a student with visual impairment highlighted how process interactions can either help or inhibit learning. The student described a sequence of events involving an external state agency that funds book purchases, bookstore purchasing timelines, submission of receipts to DSPS, and forwarding of receipts to a vendor that resulted in an insufficient timeline to fully produce alternate media in Braille by the first day of class. This scenario showcases the need to examine processes not only from within departmental silos, but also to investigate how processes affect students as they connect across and beyond the institution.

Ineffective business practices frequently result in hidden costs to the institution that draw funds away from instruction and student support. Antiquated methods tend to rely on manual processing and routing that is labor intensive and results in substantial personnel costs. There are also significant operational costs involved for paper, printing, and mailing. There is potential to reduce these costs allowing redirection of resources to fund system improvements as well as redeployment of personnel from the maintenance of inefficient processes into more meaningful support functions.

The common thread of all these concerns is a lack of progression over time that is not unusual in higher education, but is symptomatic of a lack of organizational agility. As the pace of change continues to accelerate, these operational constraints will become all the more glaring and incapacitating. To not only survive, but thrive, in this environment requires an innovative culture that is willing to adapt and eager to turn possibility into reality.

ARC Response

The college will aggressively seek to renovate its own practices and strip away clunky methods that inhibit employees from doing their best work. In alignment with its existing strategic goals, it will actively pursue “proactive, effective, and efficient operational systems.” Systematic efforts will be used to identify the barriers, explore options for improvement, and collaboratively propose changes in order to swiftly realize greater operational effectiveness.

ARC will advocate districtwide for rapid improvement in shared procedures and technologies that are a hindrance to effectiveness. It will ensure that systems and processes offer a comparable level of service for remote (virtual) students and employees. Further, ARC will provide leadership in identifying and renovating antiquated practices that are a barrier to the success of marginalized populations.

It will contemplate not only the effectiveness of individual systems and processes, but also the interactions of systems and processes across the institution. As changes are introduced, the actual experience of students and employees will be investigated in order to gauge effectiveness rather than relying on assumptions derived from a typical use case.

As described in its strategic goals, ARC will cultivate itself as an agile organization with an entrepreneurial culture that consistently innovates to grow as a vibrant and thriving asset to the community. It will empower those in leadership roles, at all levels of the organization, to champion and affect positive change. It will celebrate efforts towards process improvement as well as successful outcomes. As college technology and processes evolve, it will invest in professional growth in order to equip its employees to effectively work alongside modern technologies, experiment with new methodologies, and nurture an innovative mindset.

Capacity to Respond (Resource Considerations)

The resources that will be necessary to improve operational effectiveness are dependent upon which systems and processes are identified for modification or replacement. At minimum, time and effort will be necessary for personnel to be involved in the evaluation and redesign of business processes. ARC has substantial internal capacity for custom programming that potentially could be deployed to address some of the technological obstacles. Leadership resources will be necessary to coordinate and advocate for the desired changes. Improvements may also surface training needs to equip employees to utilize new systems and processes.

Example Strategies: Imperative 8

- Business process redesign
- Simplified error resolution
- Electronic signatures
- Conversion of manual processes to online forms
- Custom programming designed to ARC specifications (e.g., IGOR)
- Replacement of ineffective technologies
- Efficient, flexible purchasing processes to speed acquisition of products and services in support of innovative methods

Imperative 9: Cultivate Financial Sustainability

Summary Observation: *In order to respond to the previously stated imperatives, the college must have considerable financial resources to invest in its programs, services, delivery methods, facilities, and technologies. Historically, community colleges have been subject to major fluctuations in state funding based on enrollment and the California economy. The introduction of a new performance-based funding formula adds another layer of complexity. Community colleges also anticipate a variety of rising costs. An intentional approach will be needed to ensure the college has adequate resources to fund its future endeavors.*

In recent years, California has enjoyed an extended period of economic growth accompanied by a political climate that prioritized education. Total funding for the California Community Colleges increased from \$6.5 billion in 2012-13 to \$8.9 billion in 2018-19. During this same period, funding per student jumped from \$5,933 to \$8,634 per year.²⁹ However, the cyclical nature of California's economy has begun to signal that the boom period may be coming to an end. Across the system, the last major economic downturn resulted in massive rationing of education that impacted some of the most vulnerable residents of California. While the Los Rios Community College District has maintained stability by remaining fiscally conservative, reductions in state funding inevitably result in stretched operational resources and restricted instructional capacity.

In this environment, strategic community colleges take deliberate action to fully realize the incentives of public funding sources while also diversifying revenue streams to reduce the dependence on state funding. In years past, the primary incentive was enrollment or FTES which resulted in apportionment funding. Under the new Student-Centered Funding Formula, districts receive a base allocation that primarily reflects enrollment. This allocation is then supplemented by incentive-based funding calculated on the following factors:

- Low-income students (PELL grant and College Promise recipients) and AB 540 students
- Outcome measures (weights vary):
 - Degrees and certificates granted
 - Completion of transfer-level math and English within the first year of enrollment
 - Transfer to a four-year university
 - Completion of nine or more CTE units
 - Attainment of a regional living wage

These metrics were intended to promote equity and student achievement in alignment with the Vision for Success. To realize the incentive funds, colleges must actively facilitate students towards the outcome measures and ensure that data practices capture the key elements by required reporting dates. Leveraging these factors can enable colleges to capture a larger share of funding that can then be used to more effectively serve students. Additional state allocations are available through targeted funding streams such as the Strong Workforce and Student Equity and Achievement programs. However, funding for these incentives and programs is subject to fluctuations of the California economy.

Diversification remains the best protection against cyclical fluctuations and can supply resources for highly beneficial student supports. As a public agency, there are limitations on the revenue streams that community colleges can pursue. One potentially attractive option is contract education by which revenue-generating customized training is provided to employers and other entities. Another possibility is monetizing existing resources (i.e., equipment and services) to provide revenue streams that cover the operational costs associated with those resources. Grants and funding partnerships can provide income that is tied to particular initiatives or restricted uses. Donations received through philanthropic efforts can also contribute significantly, but may be more difficult to obtain when the economy is less affluent. Beyond direct revenue, institutions also cultivate financial sustainability through cost reduction, enrollment management, and differentiation. In particular, flagship programs and facilities can draw in resources through a variety of channels.

ARC Response

While retaining its core focus that places students first, the college will strategically leverage the incentives of performance-based funding, including the recently implemented Student Centered Funding Formula, in order to capture resources with which it can cover the regular ongoing cost of education. It will examine its data collection practices to ensure that all eligible activity is captured and accurately reported. Communications, marketing, outreach, enrollment management, and support services will be purposefully aligned to promote the outcomes that ARC intends to achieve.

The college will diversify its revenue streams and augment its funding sources in order to maintain an exemplary learning environment that engages students and provides employees with the best tools available to optimize the educational experience. It will explore a variety of avenues including contract education, grants, partnerships, and donations in order to fully fund activities that respond to the previously stated imperatives.

Through its efforts to streamline business practices, the college will endeavor to reduce costs and deploy its resources wisely. It will showcase flagship programs, services, and facilities to create a competitive advantage that attracts resources that can be invested in student success and equitable education.

Capacity to Respond (Resource Considerations)

As a large institution, American River College has considerable resources at its disposal, but is also subject to fluctuations in both system and district allocations. To further diversify its resources and protect against major declines in funding, time and effort must be directed towards activities designed to invite additional resources. For example, employees may expend effort developing contract education programs or seeking grant funding. Personnel may also be needed to examine data collection practices to ensure that no performance-based funding that is earned is left on the table due to incomplete or inaccurate reporting. Funding may also be needed for well-coordinated communication, marketing, and outreach efforts that support achievement of performance metrics.

Example Strategies: Imperative 9

- Blended-funding partnerships
- Contract education
- Increased outreach to AB 540-eligible and low-income populations
- Cost reduction through efficient business practices
- Marketing flagship programs to draw in resources
- Strategic enrollment management
- Philanthropic campaigns

Imperative 10: Bolster Advocacy, Collaboration, and Coordination

Summary Observation: *Within higher education, and particularly within California, there is an increasing emphasis on accountability and educational reform. District boundaries are becoming more transparent as California’s first fully online community college (Calbright) recently opened with a service area that encompasses the entire state. Community college students are also now able to easily enroll in multiple districts simultaneously through the California Virtual Campus (CVC) Exchange. Intersegmental interaction remains a prominent factor. ARC also exists within a multi-college district in which districtwide initiatives and discussions often have local implications. New ways of advocating, coordinating, and collaborating will be necessary in order for ARC to prosper and effectively serve its mission.*

American River College exists within the largest community college system in the nation and the second largest district in the state. It also navigates the middle ground between the K-12 system and California universities at the intersection of initiatives such as dual enrollment and the Associate Degree for Transfer (ADT). This context serves as an educational ecosystem that can constrain, ignore, or champion local efforts. Likewise, ARC has the ability to influence the environment in which it exists and advocate for the conditions that will best serve its students.

As a backdrop, there are multiple trends worth noting. First, both the system and the district are indicating that the future holds greater centralization and accountability than in years past. The system-wide Vision for Success is an example of this centralization. The statewide goals³⁰ place emphasis on the following areas:

- Increasing credentials earned (degrees and certificates)
- Increasing transfer
- Reducing excess unit accumulation
- Increasing employment in the student’s field of study
- Reduce/eliminate equity gaps
- Eliminate regional achievement gaps

While local districts and colleges may have additional goals, the Vision for Success has created a predetermined set of statewide priorities upon which funding is dependent for most districts. This centralization is adjacent to a regulatory structure (e.g., Title 5) that can often seem counterintuitive when it comes to operationalizing day-to-day activities in support of system-wide goals.

Within the last year, the long-held precedent of district boundaries has shifted with the creation of a statewide college for working learners (Calbright) and a statewide exchange of online students (CVC Exchange). This shift has the potential to either draw students away from Los Rios or provide a conduit to Los Rios as learners flow through these entities. While controversial, Calbright also could potentially become a resource for technological development since it is legislatively required to “distribute gains in data and learning science and effective technology-enabled tools and resources throughout the California Community Colleges” as well making digital transcript technology, open educational resources, and other tools available throughout the system.³¹

Demand for data and analytics at the college level is increasing to better understand student needs, boost decision support, and overcome operational inefficiencies. However, a repetitive theme across input gathered from stakeholders highlighted data siloes, gaps in data access, inadequate data sharing, and labor-intensive methods to glean data from disparate systems. There is a strong interest in collaborating with the District Office and K-12 partners to improve data sharing within and across districts.

ARC has maintained healthy enrollment levels and has experienced growth of 11.8% over the last five fall semesters despite the counter-cyclical relationship between community college enrollment and the economy. Much of this growth can be attributed to online education and apprenticeship. It has also worked attentively to build relationships with its K-12 partners through dual enrollment and other practices. These partnerships are reaping mutual benefits that should be developed in the years ahead.

Census Enrollment Trends of Los Rios Students for the Most Recent Fall Semesters

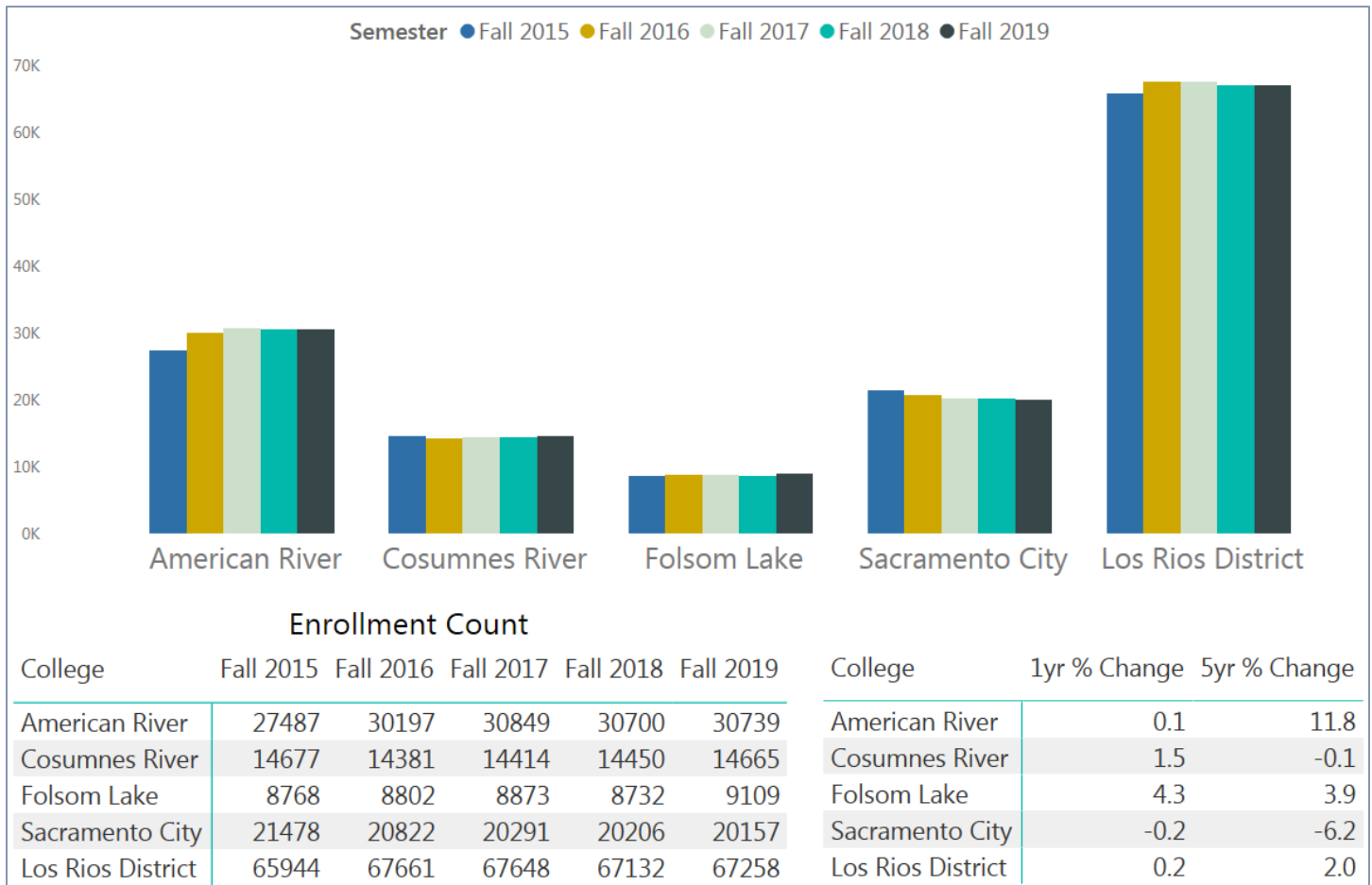


Image Source: [Los Rios Office of Institutional Research](#)

ARC must also contemplate a potential loss of autonomy as centralization occurs at both the system and district levels. This reality makes the ability to collaborate effectively with its sister colleges all the more important. Conversely, existing districtwide structures may be insufficient to facilitate inclusive, efficient collaboration that is fully informed by the perspectives of those who are closest to the work and have the deepest understanding of the human impact. Without shared mechanisms to facilitate collaboration, the Los Rios colleges may be reliant upon pre-fabricated solutions. Even when harvested from evidence-based best practices, these replicated solutions may not be ideal for each of the Los Rios colleges since the design was developed within a different college environment and for a different student population.

Over the last two years, ARC has experienced success with its new governance structure that is collaborative and action-oriented. The technique of using small project teams to efficiently design proposals for governance consideration has potential at a district level, but only if a shared methodology is developed for collaboratively co-creating solutions that consider the unique needs of each college and its students.

ARC Response

Collectively, the college will remain keenly aware of the higher education landscape in which it exists and will use its influence to promote equity-minded education. It will position itself to take advantage of, rather than be subject to, the shifts in California’s community college system and the regulatory structure under which it operates.

ARC will further develop its capacity to advocate and coordinate effectively in order to accomplish its mission. It will seek new ways of collaborating with its sister colleges in order to become a more nimble district and develop a unified voice with which to promote shared interests including regulatory relief. It will endeavor to improve decision support through increased data sharing and access to sophisticated analytics.

While there is an interdependence across the district, ARC also recognizes that its size offers unusual capacity to pilot new strategies at sufficient scale to adequately assess potential risks and benefits. It has access to a broad base of feeder high schools as well as a large, diverse student population that makes it possible to see the complexities and effects of a pilot more readily. Its growth position within the district also suggests that it can accommodate a higher level of experimentation without compromising existing enrollment efforts.

ARC will develop current and future leaders, distributed across its constituencies, in a manner that reinforces their ability to advocate, coordinate, and collaborate. Leadership will be recognized as an institutional asset while leadership development is identified as an ongoing obligation in the ARC Governance Framework.

In this dynamic environment, ARC will nurture ongoing relationships with external stakeholders to understand the changes that are most likely to occur in the region and how ARC needs to adapt. It will amplify its existing partnerships with K-12 districts, transfer universities, and other agencies.

Capacity to Respond (Resource Considerations)

The most critical resource for this imperative is a significant investment of time to monitor the environment, coordinate effectively, pilot new strategies, nurture partnerships, and develop collaboration methods. These efforts are likely to require some level of reassignment, backfill, or other personnel allocation. Access to expertise that can facilitate leadership development and training in methods of collaborative co-creation would be beneficial. Technology investments may be needed for enhanced data warehousing, business intelligence tools, or similar items to improve data sharing and access. Piloting new strategies and documenting outcomes may also require investment of financial and personnel resources through college or district funding sources in order to assess feasibility as well as potential districtwide benefits.

Example Strategies: Imperative 10

- Data sharing agreements
- Piloting methods with documented outcomes (briefs) and shared resources
- Explore using human-centered design within ARC’s governance structure as a potential method for districtwide collaboration
- Raising awareness of regulatory barriers through established leadership channels
- Business intelligence technologies



Moving Forward

American River College recognizes that it has come to a crossroad at which it must engage with the question of what the future holds, contend with what is possible, and build a shared foundation of knowledge regarding the shifting landscape. There is a strategic advantage to considering the context in which community colleges exist while creating a new perspective from which to challenge old assumptions and embrace new realities. There are almost no guarantees in this future ... except that it is going to be different and fast-paced.

ARC's Educational Master Plan, in conjunction with the Institutional Equity Plan, is intended to guide ARC's other integrated planning and resource allocation processes in order to produce an equitable future in which all students and employees flourish. Each subsequent planning process through 2031 can contemplate this plan and consider how it might contribute effort towards one or more of the imperatives. The example strategies included with each imperative can be used as a springboard for further dialogue while the ideas provided in Appendix B and the resources in Appendix C can serve as a starting point for further exploration.

As the journey takes shape, the effectiveness of the Educational Master Plan will be ascertained by how well it serves as a compass as the institution navigates towards fulfillment of its vision to transform the future of all students and the community through inclusive, equitable education.

Appendix A: Mapping of ARC Strategic Goals to Imperatives

#	Imperative	STRATEGIC GOALS			
		STUDENTS FIRST	CLEAR AND EFFECTIVE PATHS	EXEMPLARY TEACHING, LEARNING AND WORKING ENVIRONMENT	VIBRANCY AND RESILIENCY
1	Close the Opportunity Gap	X	X	X	
2	Prepare Students for an Ever-Changing Landscape of Work	X	X	X	
3	Integrate Essential Skills	X		X	
4	Tailor Experiences to the Individual	X		X	
5	Strengthen Connections to Employers		X	X	
6	Stimulate Exemplary Teaching and Learning	X	X	X	
7	Adapt the Physical Campus	X		X	X
8	Achieve Operational Effectiveness*	X	X	X	X
9	Cultivate Financial Sustainability*	X	X	X	X
10	Bolster Advocacy, Collaboration, and Coordination*	X	X	X	X

*Imperatives 8, 9, and 10 are marked for all four goals because other imperatives cannot be fully achieved without operational effectiveness, financial sustainability, and collaboration. A narrower mapping would place these items solely under goal 4.

1. Students First



The College engages and connects students early and often to people, programs, and services as an integrated educational experience. By providing personalized, proactive support, the College fosters relationships that ensure all students, particularly the historically underserved and marginalized, persist, learn, and succeed.

2. Clear and Effective Paths



The College provides easily recognizable pathways to, through, and beyond ARC. Offering well defined and supported pathways provides a foundation for success as students enter the College, make timely progress toward achieving their informed educational goals, and seamlessly transfer to other colleges and universities or find employment in their chosen career.

3. Exemplary Teaching, Learning & Working Environment



The College ensures an equitable, safe, and inclusive teaching, learning, and working environment. Culturally relevant curriculum, innovative, high- quality instructional methods and technologies, exemplary academic and student support services, and comprehensive and integrated professional development create the best conditions for teaching and learning. The College promotes liberation and honors the dignity, humanity, and contributions of all members of our community.

4. Vibrancy and Resiliency



The College promotes a culture of innovation, entrepreneurship, sustainability, and transparent communication. Proactive, effective, and efficient operational systems and governance and data-informed approaches to planning, decision-making, and resource allocation provide a high level of service to our students, community, and to one another.

Appendix B: Ideas to Explore

Below is a sampling of ideas that surfaced via EMP dialogue and may provide food for thought for other planning processes.

Planning Connection	Ideas to Consider
Distance Education	<ul style="list-style-type: none"> - More fully online programs - Creating a sense of community and virtual spaces to gather within the online environment
Employee Development and Retention	<ul style="list-style-type: none"> - All ARC employees need to know more about college services that are available to students, especially financial aid. - Create a faculty retraining program so that faculty can appropriately adapt to new curriculum. - Increase funding for employee travel for professional development - Employee recognition program
Facilities	<ul style="list-style-type: none"> - Non-traditional branch campus locations (e.g., Sunrise Mall) - Housing/dorms paired with other social services - Support for attractive internal signage for wayfinding and informational purposes - Space for an African-American Culture Destination that promotes cultural awareness and acceptance - Providing an orientation and mobility instructor who can assist students with disabilities to learn how to best navigate the campus to get to class and support services
Strategic Enrollment Management	<ul style="list-style-type: none"> - Pre-college and outreach programs to help all students access higher education and make connections to support programs on campus. - Blurring the lines between on-campus, online, and hybrid (e.g., students Zoom into class) - Credits and badges for work experience - Cohort-based model in which the curriculum is entirely integrated and rich with projects that relate across disciplines - Cut back on or eliminate degrees/certificates that have low job placement - Remote location instruction - Elimination of the semester/shorter-length courses
Technology	<ul style="list-style-type: none"> - Develop a student engagement app - Equipping classrooms for blended modalities (combination of physical interactions, virtual interactions, and online instruction) - Leveraging technology to get to know our students better - Plan for technology change that enable the virtual world to be part of a full classroom environment. - Badging technology - May need to look now at finding different learning management systems and onboarding systems that are easier for modern learners, how they learn, and where the world is headed - College-based database or student-held transcripts (or both) for instant recruitment by employers - Allow employee access to YouTube via Los Rios unified authentication - Provide faculty with easy access to the contact information for students who have a related major - Assessing all software and technologies required for courses to ensure accessibility for students with visual impairments and other disabilities
Program Review (Unit-Level Suggestions)	<ul style="list-style-type: none"> - Modular learning and instructional models with interchangeable pieces - Training for coders and designers (expected to be in high demand) - STEM-specific targeted support - Just-in-time instruction - Concept mapping across disciplines

Appendix C: Further Reading

The resources provided below are recommended as reference material offering a variety of perspectives that may be useful to inform subsequent planning processes.

Alternative Credentials and Competency-Based Education (CBE)

[Competency-Based Education: A Strategy for Skills Upgrading in California](#) (California EDGE Coalition, July 2019)
[How Competency-Based Education May Help Reduce Our Nation's Toughest Inequities](#) (Lumina, October 2017)
[Costs of Competency-Based Programs Come Into Focus](#) (Chronicle of Higher Education, October 2016)
[Understanding Competency-Based Education Toolkit](#) (Strategy Labs/Lumina Foundation, 2017)
[Quality Framework for Competency-Based Programs](#) (Competency-Based Education Network, September 2017)
[Quality Framework for Competency-Based Programs: A User's Guide](#) (Competency-Based Education Network, 2018)
[Outcomes of Competency-Based Education in Community Colleges from the Evaluation of a TAACCCT Grant](#). (Mathematica Policy Research, 2016)
[Alternative Credentialing Infographic](#) and [Full Report](#) (Pearson, June 2016)
[CNM to Become First Community College to Issue Student-Owned Digital Diplomas](#) (Central New Mexico College, November 2017)
[Realizing Employment Goals for Youth through Digital Badges: Lessons and Opportunities from Workforce Development](#) (Urban Institute, May 2016)
[Alternative Credentials: Prior Learning 2.0](#) (Online Learning Consortium, 2017)
[SUNY Micro-Credentialing Task Force Report and Recommendations](#) (The State University of New York, January 2018)
 Extensive resources are also available online via the CBE Network at <https://www.cbenetwork.org/resources/>

Basic Needs: Poverty, Food Insecurity, and Homelessness

[Going Hungry, Addressing Student Food Insecurity on Campus](#) (CC League of California, July 2019)
[California Community Colleges #RealCollege Survey](#) (The Hope Center, March 2019)
[Addressing the Basic Needs of California Community College Students](#) (The Hope Center, March 2019)
[Community College Approaches to Address Basic Needs and Improve Financial Stability for Low-Income Students: Lessons from the Working Success Network Implementation Evaluation](#) (DVP-Praxis, January 2018)
[Public Benefits and Community Colleges: Lessons for Benefit Access for College Completion Evaluation](#) (DVP-Praxis, Ltd/OMG Center for Collaborative Learning, 2014)

California Community College System and the Funding Formula

[Vision for Success](#) (California Community Colleges Chancellor's Office)
[2019 State of the System Report](#) (California Community Colleges Chancellor's Office)
[Overview of the Student Centered Funding Formula](#) (California Community colleges Chancellor's Office)
[Funding Formula Non-Technical FAQs](#) (California Community Colleges Chancellor's Office)
[Putting California's Workers at the Center: Design Principles for the Online Community College](#) (IFTF/CCCCO)
[Higher Education as a Driver of Economic Mobility](#) (Public Policy Institute of California, 2018)
[California is facing a shortfall of college-educated workers](#) (Public Policy Institute of California, January 2019)

Collaboration and Organizational Agility

[The Co-creation Imperative: How to Make Organizational Change Collaborative](#) (Forbes, February 2018)
[Agile Compendium](#) (McKinsey & Company, October 2018)

Essential Skills for the Future/Liberal Education

[Is Collaborative Problem Solving the Key to the Skill for the Fourth Industrial Revolution](#) (Forbes, December 2018)

[Robot Ready: Human+ Skills for the Future of Work](#) (Strada Institute for the Future of Work, 2018)

[Skill Shift: Automation and the Future of the Workforce](#) (McKinsey Global Institute, May 2018)

[Robots Want Your Tasks, Not Your Jobs \(or Why the Liberal Arts Still Matter\)](#) (Techonomy, April 2019)

Future of Learning

[Future Forward: The Next Twenty Years of Higher Education](#) (Blackboard, 2017)

[The Future of Work and What It Means to Higher Education, Part I](#) (Workday)

[The Future of Higher Education: Will Higher Education Sizzle the Future or Fall Victim to It?](#) (Academic Impressions, 2018)

[On Change and Relevance in Higher Education: A Q&A With Phil Long.](#) (Campus Technology, March 2018).=

[Relearning How We Learn, From the Campus to the Workplace](#) (Cognizant, November 2018)

[Preparing All Learners for an Uncertain Future of Work](#) (Getting Smart, February, 2019)

[Ask About AI: The Future of Work and Learning](#) (Getting Smart, November 2017)

[The Future of Jobs and Jobs Training](#) (Pew Research Center, May 2017)

[Reading Signals from the Future: Educause in 2038](#) (Educause, July 2018)

[A Blended Environment: The Future of AI and Education](#) (Getting Smart, January 2018)

[Q&A: Artificial Intelligence Expert Shares His Vision of the Future of Education](#) (Ed Tech Magazine, April 2017)

[Virtual Reality, Mixed Reality, Immersion, and Gamification: How Immersive Technology is Changing the Way CSU Students Learn](#) (The California State University, February 2018)

[Smart Machines and Human Expertise: Challenges for Higher Education](#) (Educause, August 2018)

[The Reading Brain in the Digital Age: The Science of Paper versus Screens](#) (Scientific American, April 2013)

[The Blockchain Revolution and Higher Education](#) (Educause, March 2017)

[7 Things You Should Know About Adaptive Learning](#) (Educause, 2017)

[The Campus of the Future](#) (Educause, August 2018)

Infographic: [How Must We Evolve to Remain Relevant to the Student of Tomorrow](#) (EAB, January 2019)

[Reinventing Schools for the Digital Age](#) (McKinsey Digital, July 2017)

[The Evolving Mission of Workforce Development in the Community College](#) (Community College Research Center, March 2019)

[The Future of Undergraduate Education, The Future of America](#) (American Academy of Arts and Sciences, 2017)

[Competitive advantage with a human dimension: From lifelong learning to lifelong employability](#) (McKinsey & Company, February 2019)

[Is College Worth It? How the gig economy is reshaping higher education](#) (Mic, December 2017)

[From Educational Institutions to Learning Flows](#) (Institute for the Future, 2013)

[The False Dichotomy Between Academic Learning & Occupational Skills](#) (Dædalus, Fall 2019)

[Future of College Education: Students for life, computer advisers, and campuses everywhere](#) (Washington Post, July 2018)

[The Future of Learning: Education in the Era of Partners in Code](#) (KnowledgeWorks, 2015)

[Exploring the Future Education Workforce: New Roles for an Expanding Learning Ecosystem](#) (KnowledgeWorks, 2015)

[Cultivating Interconnections for Vibrant and Equitable Learning Ecosystems](#) (KnowledgeWorks, 2015)

[How Will We Uphold Equity in the Future of Work and Learning? 5 Highlights from Horizons](#) (JFF, June 2018)

[The twelve most innovative colleges for adult learners.](#) (Washington Monthly, September/October 2017)

[Artificial Intelligence in Higher Education: Current Uses and Future Applications](#) (Learning House, November 2018)

[Pushing the Boundaries of Learning with AI.](#) (Inside Higher Ed, September 2018)

[Higher Education in a World Where Students Never Graduate.](#) (Inside Higher Ed, August 2018)

[Optimism and Anxiety: Views on the Impact of Artificial Intelligence and Higher Education's Response, January 2018](#) (Gallup-Northeastern University)

[Project-Based Learning in Higher Education](#) (Sam Houston State University)

Future of Work

[Literature Review: Impact of Automation and Artificial Intelligence on the Workforce](#) (Centers of Excellence for Labor Market Research, August 2019)

[What's the Future of Work?](#) (Yale Insights, November 2017)

[Every study we could find on what automation will do to jobs in one chart.](#) (MIT Technology Review, January 2018)

[Independent Work: Choice, Necessity, and the Gig Economy](#) (McKinsey Global Institute, October 2016)

[Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation](#) (McKinsey Global Institute, December 2017)

[Harnessing Automation for a Future that Works](#) (McKinsey Global Institute, January 2017)

[Workforce of the Future: The Competing Forces Shaping 2030](#) (PWC, 2018)

[21 Jobs of the Future: A Guide to Getting – and Staying – Employed](#) (Cognizant, November 2017)

[Emerging Technologies' Impact on Society & Work in 2030](#) (Institute for the Future, December 2018)

[Future of Work Infographic](#) (Gartner, September 2017)

[The End of Employees.](#) (Wall Street Journal, February 2017)

[Accelerating Workforce Reskilling for the Fourth Industrial Revolution: An Agenda for Leaders to Shape the Future of Education, Gender and Work](#) (World Economic Forum (July 2017)

[Testimony of Dr. Annette Bernhardt to the Little Hoover Commission, January 25, 2018](#) (UC Berkeley Labor Center)

[Will robots and AI take your job? The economic and political consequences of automation.](#) Brookings Institution, April 2018)

[National Skills Coalition: Future of Work](#) (links to various resources)

Future of Work – Equity Implications

[Privacy, Security, and Digital Inequality: How Technology Experiences and Resources Vary by Socioeconomic Status, Race, and Ethnicity](#) (Data & Society, September 2017)

[Labor 2030: The Collision of Demographics, Automation and Inequality](#) (Bain, 2018)

[Making Room: Reflections on Diversity and Inclusion in the Future of Work](#) (Cognizant, October 2018)

[Women, Automation, and the Future of Work](#) (Institute for Women's Policy Research, 2019)

[Four Diversity and Inclusion Disruptors in the World of Work](#) (Forbes, October 2018)

[Automation and the Future of the African American Workforce](#) (McKinsey, November 2018)

[How Will We Uphold Equity in the Future of Work and Learning? 5 Highlights from Horizons](#) (JFF, June 2018)

Guided Pathways and Other Research

[Community College Research Center at Columbia University](#) (various publications)

K-12 Enrollment Projections

[California Public K-12 Graded Enrollment and High School Graduate Projections by County, 2018 Series](#) (State of California, Department of Finance, January 2019)

Regional Labor Market

[Sacramento Region Public Sector Workforce Needs Assessment](#) (Centers of Excellence for Labor Market Research, August 2019)

[Greater Sacramento Region Resources](#) (Various studies from the Centers of Excellence for Labor Market Research)

[Labor Market Information for Sacramento-Roseville-Arden-Arcade MSA](#) (State of California Employment Development Department)

Appendix D: Supplemental Data

ENROLLMENT DISTRIBUTION BY STUDENT DEMOGRAPHICS

GENDER

	2015-2016		2016-2017		2017-2018		2018-2019	
	Headcount	Percent	Headcount	Percent	Headcount	Percent	Headcount	Percent
Female	23,807	48%	22,943	45%	23,174	45%	22,936	44%
Male	24,993	50%	26,730	53%	27,791	54%	27,983	54%
Unknown	1,006	2%	1,026	2%	946	2%	889	2%
Total	49,806	100%	50,699	100%	51,911	100%	51,808	100%

ETHNICITY

	2015-2016		2016-2017		2017-2018		2018-2019	
	Headcount	Percent	Headcount	Percent	Headcount	Percent	Headcount	Percent
African American	4,453	9%	4,148	8%	4,067	8%	3,823	7%
Asian	4,714	9%	4,769	9%	5,058	10%	5,250	10%
Filipino	985	2%	1,072	2%	1,132	2%	1,114	2%
Hispanic/Latino	10,418	21%	11,255	22%	12,644	24%	13,508	26%
Multi-Race	2,689	5%	2,737	5%	2,791	5%	2,818	5%
Native American	308	1%	289	1%	293	1%	262	1%
Other Non-White	369	1%	268	1%	233	0%	199	0%
Pacific Islander	462	1%	449	1%	465	1%	436	1%
Unknown	4,247	9%	5,158	10%	4,617	9%	4,228	8%
White	21,161	42%	20,554	41%	20,611	40%	20,170	39%
Total	49,806	100%	50,699	100%	51,911	100%	51,808	100%

AGE

	2015-2016		2016-2017		2017-2018		2018-2019	
	Headcount	Percent	Headcount	Percent	Headcount	Percent	Headcount	Percent
18-20	9,783	20%	9,698	19%	9,855	19%	9,867	19%
21-24	11,834	24%	12,064	24%	11,688	23%	11,387	22%
25-29	9,436	19%	9,850	19%	10,135	20%	10,002	19%
30-39	9,777	20%	10,193	20%	10,744	21%	11,244	22%
40-49	4,953	10%	4,918	10%	5,001	10%	5,115	10%
50+	3,526	7%	3,418	7%	3,277	6%	3,170	6%
<18	497	1%	558	1%	1,211	2%	1,023	2%
Total	49,806	100%	50,699	100%	51,911	100%	51,808	100%

Data above was extracted from the [ARC Data on Demand](#) system on October 10, 2019.

References and Notes

- ¹ Data extracted from American River College Self Evaluation Report of Educational Quality and Institutional Effectiveness, July 2015.
- ² Bailey, T. (2018, March). [Equity and Guided Pathways: Which Practices Help, Which Hurt, and What We Don't Know](#). Community College Research Center, Teachers University at Columbia College.
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