REPORT
SUSTAINING THE CAREER ADVANCEMENT ACADEMIES

MAY 2015

INCREASING ACCESS AND OPPORTUNITY

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These individuals and institutions are committed to creating opportunities for improved educational and career security, and better qualities of life for individuals, their families, and their communities. We celebrate them for those efforts. We also are grateful for their contributions as thought partners. Their insights were instrumental in helping the Equal Measure evaluation team shape and refine what we learned over the course of the initiative.

INTRODUCTION

Launched in 2007, the Career Advancement Academies (CAAs) were designed to target under-prepared young adults (ages 18-30), whose low basic skills in reading, writing, and mathematics shut them out of high-wage jobs, and help them with the foundational skills to pursue postsecondary education and careers.

The CAA "model" is not replicated uniformly across colleges. Instead, CAAs offer a framework of common elements that provides each college the space for innovation in its interpretation and implementation. The framework includes five core elements:

INDUSTRY-RESPONSIVE TECHNICAL TRAINING:

While often building on existing Career and Technical Education (CTE) courses, CAA programs ensure the relevance of students' technical training by adapting and developing course content in consultation with local employers. CAAs often serve as a bridge or a link into higher-level certificates and academic programs of study.

CONTEXTUALIZED BASIC SKILLS:

It was a clear goal of the initiative's design that, rather than grafting programs onto existing infrastructures, or creating new infrastructures, CAA would create incentives for institutional change, prompting colleges to interlace their systems for delivering career education with those for providing basic skills instruction. CAA programs develop instructional approaches that contextualize basic reading and math skills into the technical courses. Combining foundational basic skills with technical training allows students to make immediate progress toward their goals, rather than waiting to complete a succession of traditional basic skills courses. It also helps students see and apply academic content that is immediately relevant to their career. These changes required CTE and academic faculty to work together to provide basic skills content in the context of career-relevant technical courses.

STUDENT COHORTS:

CAA students take all or most classes together as a cohort throughout the duration of the program. This cohort model allows students to form peer learning communities, helping each other learn the subject matter and supporting each other through school, life, and career events.

"TRANSITIONS" SUPPORT:

In order to prepare students for success in the workplace, CAAs offer targeted "transitions" supports, including career guidance, work readiness skills, job fairs, internships, and industry visits. Faculty and administrators in support services bridge silos in order to provide comprehensive services to CAA students.

INTENSIVE STUDENT SUPPORT SERVICES:

CAA programs help students manage personal issues that might interfere with their ability to succeed in the program by working closely with the college's counselors, or referring students to outside service providers. The programs help mitigate the external and life events that can affect student retention and completion.

CAA IMPACT TO-DATE

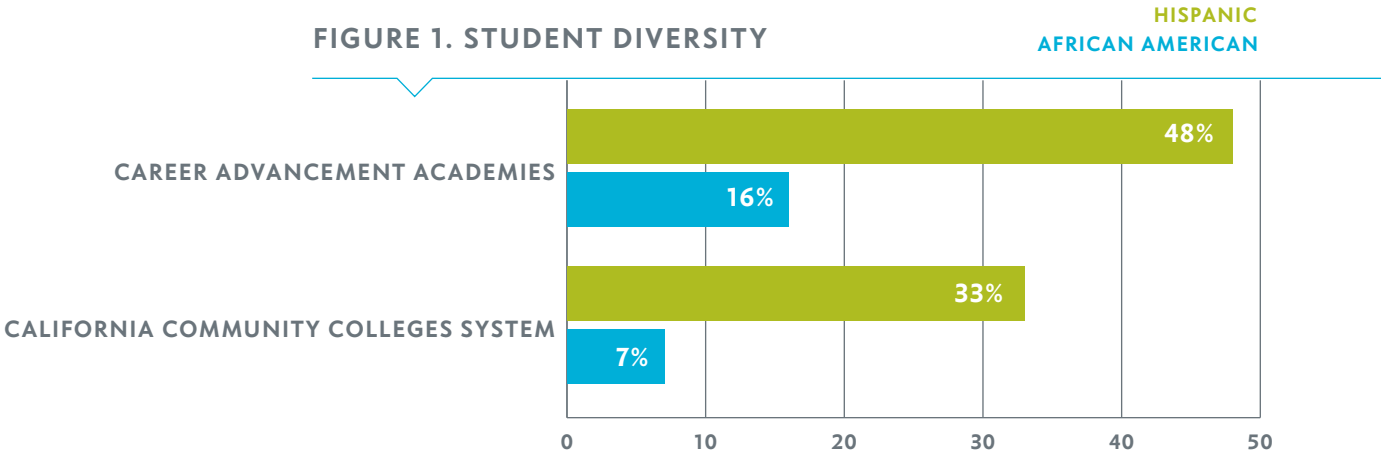
The Career Advancement Academies achieved substantial scale, geographic diversity, and reach.

From 2007 to 2014, the CAAs enrolled nearly 10,000 students across 30 colleges.[1] Career Advancement Academies served students of considerable ethnic, racial, gender, and age diversity. Based on data from 2007-2013, CAA students were more diverse than their peers across the California Community Colleges system. Notably, 48% of CAA students were Hispanic of any race, and 16% were African American, compared to 33% and 7% respectively for the California Community Colleges system.

Aligned with the CAA goal of recruiting unemployed or under-employed Californians, high percentages of CAA students received educational financial supports. Forty-two percent of CAA students were Pell Grant recipients, and nearly two-thirds (63%) received Board of Governor Fee Waivers, indicating that they qualified for financial aid, and/or were receiving CalWorks, Supplemental Security Income, General Assistance/ Relief, or met other income relief (e.g., Veterans Affairs dependent fee waivers).

Over the course of the first five years, more than two-thirds of CAA students persisted in college, and 24% obtained a system-recognized certificate or degree. During Phase II, over 51% of CAA students received a system-recognized certificate, degree, or low-unit certificate. Twenty-three percent of Phase II (2011-2014) CAA students received a system-recognized certificate or degree, a statistically significant three percentage points higher than a comparable group of non-CAA students. These student-level impacts are attributable to the CAA programs.[2]

FIGURE 1. STUDENT DIVERSITY



1 This count is based on individual college reports and not on Chancellor's Office Management Information Systems data.

2 Please refer to the Appendix for a summary of CAA participation and outcomes in the 2013-14 school year.

STRUCTURE OF THIS REPORT

Given the important impact CAAs have had on student academic and certificate attainment, there is a strong impetus to institutionalize the CAA work, begging the question:

What does it take for colleges to institutionalize elements of the CAAs, so that they can sustain the impacts well beyond the course of the grant?

In this Report, we examine the factors that have influenced how and to what extent six colleges across four regions, are working to institutionalize and sustain their respective CAA programs. We use *institutionalize* and *sustain* interchangeably in this Report to describe the process of maintaining the CAAs or elements of the CAAs after grant funding ends. In Part One, we present the common factors that have facilitated or impeded institutionalization to date, and elevate early lessons for the field. In Part Two, we provide case studies of the six CAAs. We selected these CAAs (summarized in Table 1) to reflect different regional and institutional contexts, as well as different types of CAA programs serving a variety of students.

Table 1. Overview of CAAs

Region	College	CAA	Average Cohort Size	CAA Duration in Semesters	Certificate(s) Awarded	Post-Completion Opportunities
East Bay	Berkeley City College	Public and Human Services	20	2	Certificate of Proficiency	Certificate of achievement and Associate's (AA) degrees in one of three areas: Community and Public Services, Community Health Worker, or Social Services Paraprofessional
	Diablo Valley College	Pre-Apprenticeship	17	1		Job placement into various labor union apprenticeships
Los Angeles/ South Bay	El Camino College	Welding	29	1	Local Certificate, OSHA 10 Certificate (nationally recognized)	AA degree
Central Valley	West Hills College Lemoore	Maintenance Mechanic	20	1	District-recognized certificate	Job placement
	Madera Center	Maintenance Mechanic	20	18 weeks	Certificate of Completion (district recognized)	Graduates can sit for Manufacturing Skills Standards Council Safety (MSSC) industry-recognized certification
San Mateo	Skyline College	Automotive Technology	20	1	Certificate of Proficiency	Certificates of specialization (which prepare students for industry ASE certifications) and AA degree

PART ONE

Sustaining CAAs

Six years into the initiative, CAA stakeholders are looking beyond 2015, when their grants end, and are figuring out how to sustain CAAs – or at least their core elements.

In many ways, the CAA program has been successful at sparking institutional change. Over the years, many CAA champions have begun to see a shift in mindset on their campuses, and the bridging of historic divides between the academic and CTE sides of the college. Colleges are showing increased willingness to allow time for academic, CTE, and support services departments to work together. They are allowing CAAs to exercise flexibility in establishing structures and processes that make sense for their programs.

CAAs have begun experimenting with promising practices for institutionalization, and are generating ideas for embedding elements of the framework beyond the confines of the grant-funded "CAA program." Additionally, while the degree of sustaining the CAA programs as they are structured today varies across the six colleges, all six have institutionalized three core CAA components: contextualized basic skills instruction, student cohort approaches, and offering CAAs as shorter-term certificates that "stack" or "lattice" into higher-level certificates or credentials, creating a clear path for students wishing to continue their education.

Based on the experiences of the six CAA colleges, there are three levels of factors that influence institutionalization: program-, institution-, and community-level factors. We discuss these factors in greater depth in this section.

FACTORS INFLUENCING INSTITUTIONALIZATION AND SUSTAINABILITY

PROGRAM-LEVEL FACTORS

To increase the likelihood of institutionalization, CAA programming must be high quality, relevant to the institution, its students, and employers, and have strong infrastructure to support continued implementation. Furthermore, the CAA must have – and use – evidence of impact to make a strong case for continuity. Program factors that influence the likelihood of CAA sustainability include:

- The quality and responsiveness of the CAA program to meet student, college, community, and employer needs
- Existence and use of evidence of CAA success to fuel planning for extension, scaling, or internal replication
- Dedicated leadership and staff with sufficient capacity to carry out the program with excellence
- Internal and external relationship management structures that ensure continuity in light of leadership, staff, and faculty transitions
- Faculty and instructor recruitment, retention, professional development, and incentives, including dedicated paid planning time and cross faculty/instructor supports
- Program resources, including equipment and student financial aid to cover costs of operations and student enrollment

INSTITUTION-LEVEL FACTORS

Beyond program strength, several factors position the CAA as a "good fit" within the institutional culture and vision, thereby increasing the likelihood of institutionalization. These factors include:

- High-level leadership support, and the existence of multiple champions across many levels within the institution
- Clear institutional and CAA mission alignment
- Embedded accountability mechanisms that ensure that the CAA is connected to institutional performance measures and processes for continuous improvement
- Existence of institutional infrastructure and policies that support cross-departmental exchange and ongoing communications
- Institutional incentives and budget allocations specific to the CAA

COMMUNITY-LEVEL FACTORS

External support and validation for a CAA have positive implications for sustainability. CAAs are more likely to continue if and when they are linked to the community and a broader set of stakeholders who can advocate for program continuity and institutionalization. Based on the experiences of the six CAAs, these factors are associated with sustainability:

- Multi-level institutional connections to employers and community partners
- Strong alignment and ability to leverage state, regional, and national imperatives
- Ability to clearly document and illustrate community demand

Providing quality, customized programming – focused on students and employers – increases demand and builds advocates for external sustainability.

All six CAAs have mechanisms in place to gather and respond to student and employer feedback, make mid-course corrections, and increase the resonance of program offerings.

Industry-recognized technical training is one of the core components of the CAA framework. The colleges that have gone above and beyond traditional employer engagement have created programs vital to local employer needs, and have gained strong external champions and advocates. All six colleges maintain deep, personal, one-on-one connections with local employers. They rely on these relationships, as well as on program and labor data, to refine current programs, and identify emerging training needs. Lemoore and El Camino, for example, have analyzed student data to understand what program expansions could better meet employment demand, and which program components link to shrinking sectors and therefore should be reconfigured. Skyline has used a similar approach to identify and recruit new employer champions for additional CAA programs, leading to a significant expansion in CAA program offerings.

Similarly, evidence from site visits suggests that CAA staff are open to learning from the students' needs, and are implementing feedback practices to ensure quality programming. In all six CAAs, these feedback cycles have resulted in strong satisfaction, high levels of demand, and future student recruitment pipelines, often driven by word of mouth recommendations. As a result of this "end user" feedback cycle, El Camino, for example, has changed its CAA program length, Madera has developed additional opportunities for students to attain higher-level trainings, including a career and transfer center, and Berkeley has hired a dedicated job developer to ensure that student and employer satisfaction is maintained.

Aligning the CAA with the mission and mandates of the college allows administrators to easily embrace the goals of the program, and see where it fits within the broader vision of the college.

All six CAAs have worked diligently to showcase this alignment to college leadership, administrators, faculty, and other stakeholders.

At this stage of longevity and development in all six colleges, leaders, faculty, and administrators use a common language to describe how the CAA programs meet their college's mission and vision. Almost universally, they viewed CAAs as important on-ramps for students who may be underprepared, and the contextualized basic skills instruction is commonly viewed as a successful approach to basic skills catch-up with real time application. In addition, the colleges have elevated the CAAs as an important engagement and retention approach to support student success, aligning directly with the state-wide completion and diversity agenda. Each of the six colleges have strong commitments to serving their communities, and recognize the importance of career and technical education programs, including the CAA, to sustaining a strong economy in their communities and meeting institutional missions. Several colleges noted that as staff and administrators are hired, it is expected that they embrace the CAA approach, and view career and technical education as a valuable component of the college's programs.

Creating an institutional climate and infrastructure that supports cross-departmental programs and collaboration has important implications for creating multiple internal CAA champions who can support institutionalization.

Each of the six colleges have a central champion who coordinates the many moving parts of the CAA, and attends to the daily program tasks.

Among other important roles, the champion coordinates with different academic and student services departments, as well as with the leadership hierarchy, so that the CAA remains on the agenda of the president, academic and student services deans, faculty, advisors, and instructors. Most of the six CAAs place a premium on identifying strong instructors who can provide pedagogical leadership, collaborate, and champion the program on the instructional level. More than half of the six colleges enacted cross-departmental advisory committees, as a way to continuously engage institutional colleagues in the work of the CAAs. Berkeley and El Camino have dedicated champions who catalyze the development and growth of the CAA programs, including managing any logistical and operational issues. El Camino's contextualized math and welding class is predicated on the math instructor periodically sitting in on the welding course, and regularly communicating about student concerns and progress. Lemoore established a faculty and staff CAA implementation advisory team that works together to support the function of the CAA. And, Madera placed a vice president on one of its campuses to connect key stakeholders, and communicate about CAA success.

Funding continues to play a critical role in sustainability.

CAAs that have braided resources and leveraged additional grants, including federal, state, and college initiatives, are best poised for sustainability. Others are adapting lessons from the CAAs to inform new initiatives, as a way to ensure continuity.

Colleges are thoughtful about the types of resources they tap, and about the funding opportunities for which they apply, using lessons from CAA implementation to prepare stronger applications for other prospective funding. Over the course of the CAA grant, colleges also have worked to move the program away from soft monies. Using CAA as a springboard, Skyline, Madera, and Diablo Valley secured Department of Labor funding to broaden career and technical education programs on their campuses. Berkeley used its CAA experience as the impetus for Linked Learning state funding, allowing the college to sustain key CAA elements and apply lessons learned when proposing or rolling out similar new initiatives. In order to place its CAA courses in the 2015-16 college catalog as a Certificate Program, and move the program off of grant resources, Diablo Valley put its CAA courses through local and state curricular processes for approval.

When colleges adopt or adapt CAA components in other departmental programs or curricula, they are taking positive steps toward institutionalization.

All six colleges have presented and shared CAA successes across their institutions, resulting in the adaptation and adoption of these practices in other college priority areas.

For example, Diablo Valley's business administration department revised its Office Professional Certificate of Achievement program to incorporate elements of the CAA program, including the cohort model and contextualized math and English courses. The math, English, and philosophy departments at Madera adopted the use of embedded tutors in core courses, directly based on CAA advising and academic support approaches. And, El Camino's mathematics department uses the CAA model for contextualized developmental mathematics to guide instructional approaches in its non-CAA developmental mathematics courses.

CHALLENGES TO INSTITUTIONALIZATION AND SUSTAINABILITY

Despite much progress toward institutionalizing CAAs, three main challenges to sustainability persist, and CAAs are crafting a variety of strategies to mitigate them.

A dedicated CAA coordinator is a critical element of the CAA approach. But supporting this position can be resource intensive, making it difficult to sustain.

CAA coordinators organize instruction, student supports and advising, student recruitment, cohort management, professional development, employer engagement, and general program oversight, among other responsibilities.

The colleges have taken different approaches to addressing this challenge, including leveraging other grants, creating a critical mass of CAAs to substantiate a dedicated counselor, and attempting to embed CAA coordinator duties into existing advising or counseling staff, or as part of faculty and instructor responsibilities.

Transitioning and codifying the relationships and social capital from an individual level to an institutional level is an unaddressed need.

CAA success often rests on the shoulders of a small handful of institutional and community champions.

They are committed to the goals of the CAA, and can leverage individual relationships within and outside of their college to accomplish tasks. Creating structures to maintain these relationships and commitments, in light of potential transitions, is critical for institutionalization. For instance, several colleges are exploring how to incorporate CAA tasks into job descriptions to sustain relationships created internally and externally. In several cases, continuing the cross-departmental advisory group meetings as mandatory or "regular practice" has helped codify communication among departments, and assisted in breaking down functional silos.

A strong data infrastructure requires not only that the right data are collected and analyzed, but that stakeholders use data to continuously refine programming.

While CAAs often use employer and student feedback to refine programming, these continuous improvement processes are not standardized practice, and are rarely embedded into the programmatic functions.

Colleges must develop strong data systems and processes in order to track demand, know when to adjust or cut the program, and when to transition to a new CAA program. Colleges also must address how they can implement data systems more effectively to manage student recruitment and screening, and assess students' skill sets and expectations.

LESSONS FOR THE FIELD

Based on the experiences of the six CAAs, we offer these lessons for the broader field, particularly for colleges and programs that are considering starting and/or institutionalizing similar soft-dollar funded programs.

How a CAA-type program is established from the *onset* may have ramifications for longer-term sustainability. Institutional precedent, scale of the program, and alignment with existing college offerings all are associated with institutionalization and sustainability.

When the CAAs were introduced, they were modeled on previous or existing programs in the college, providing stakeholders with greater confidence that they would be sustained.

In part, long-term sustainability is due to this institutional memory, as well as to individuals in the college recognizing elements of the new program that had proven successful in the past. Furthermore, this adoption or adaptation of program components helps establish a sense of continuity and intentionality, rather than making the new program feel like a passing "fad." Building the CAA program as a natural extension of an existing program of study – in most cases an on-ramp or a bridge to an associate's degree or a system-recognized credential – rather than developing the CAA as a stand-alone offering, is associated with increased likelihood of sustainability, since such programs develop natural student recruitment mechanisms.

The proof continues to be in the pudding. Evidence of student success and satisfaction, and clear employer demand and approval, are critical drivers for institutionalization.

CAA leaders have developed ongoing processes to track student outcomes and satisfaction, and employer demand and approval.

In doing so, CAA leaders are building a strong case for sustaining CAA programs, or at least for core elements such as contextualized basic skills and student cohorts.

Nurturing strong partnerships is a low-tech and lasting tactic to advance agendas and institutionalize elements of CAA programs.

Almost all of the individuals involved in CAA programs are expert relationship managers who have cultivated relationships with students, faculty, administrators, employers, and external partners.

To inform program design, they listen to students and pay attention to their needs, resulting in stronger student outcomes and student satisfaction with the program. They also build direct connections to community-based organizations, which can help offset some of the advising, counseling, and "life" supports CAA students need, but that the college might not provide. Finally, they establish strong partnerships with local employers. These partnerships build trust, allowing employers to see the value of the CAA program to their workforce and training needs. Beyond benefiting the programs, these relationships create strong, vocal, and very influential CAA advocates. These allies can play an important role in influencing program continuity, and in securing institutional and external resources.

Although a strong champion/coordinator is critical to the implementation of the CAA, there must be an "exit strategy." Programs can be sustained in the absence of direct champions, but long-term sustainability may be tenuous without systems to withstand staffing turnover.

While building relationships certainly is important, these partnerships cannot hinge indefinitely on individual connections.

The CAAs that are most likely to be sustained established clear benchmarks and processes to transition the responsibility for implementation and relationship management from one individual to a team of college leaders, administrators, faculty, and counselors. While this transition has required building strong trust, buy-in, and shared accountability, the ultimate goal is to make the program more resilient to staff turnover, and enhance its sustainability.

Sustaining programs like the CAA hinges in large part on the institution's existing infrastructure, and its willingness to invest in faculty, instructor, and administrator capacity building and incentives.

One of the core elements of the CAA – contextualized teaching – requires an institutional commitment to help faculty learn and adopt these instructional practices.

When institutions provide such professional development for faculty and administrators, at least on an annual basis, they signal support for this type of instruction, and ensure the presence of strong contextualized teaching. Faculty development helps instructors "meet students where they are," and trains them to collaborate and communicate with other instructors to contextualize the academic instruction. Since CAAs require faculty to teach the same cohort of students, faculty collaboration and communication are critical.

Community colleges today must navigate an environment defined by funding and legislative challenges. Given this climate, sustainability will become synonymous with institutional agility and ability to balance mission and contextual realities.

In an environment of reduced resources, it is important for colleges to identify and creatively braid different strands of funding.

Colleges must also align this weaving of resources with institutional priorities. Most of the six colleges are applying salient lessons, design elements, and guiding principles from the CAA programs to align with other local, regional, and state directives. Bucking the common tendency to follow the resources, these colleges are building on existing investments, adopting the most promising and sustainable elements of the CAA programs, and melding these to meet mission and contextual realities.

PART TWO

CAA Case Studies

BERKELEY CITY COLLEGE

East Bay Region: Public and Human Services CAA

With its intimate urban campus, Berkeley City College has long fostered interdisciplinary and collaborative methods. This has provided a platform for the successful launch of its Public and Human Services CAA, and bodes well for program sustainability.

Located in the heart of downtown Berkeley, just two blocks from UC Berkeley, Berkeley City College (BCC) is a one-building urban campus that serves more than 7,500 students. From the first year of its founding (1974), the college has focused on increasing access to educational opportunities for students with unmet learning needs. Having started as a college committed to adult education and "non-traditional" study, it has maintained its focus on serving the needs of these students even after broadening its degree and certificate offerings. Following the economic downturn, BCC developed the Public and Human Services (P&HS) program to provide pathways for students interested in entering this high-demand field.

OVERVIEW/CONTEXT

In response to a desire to offer more programs that support direct services for underserved populations in the region, BCC created the Public & Human Services program in 2006. Since it was created, the P&HS program offers three AA degrees: the existing Social Services Paraprofessional and Community Health Worker AA degrees were updated, and a Community and Public Service AA degree was added by clustering existing classes. Through advocacy efforts from a long-time administrator and instructor, and support from the individual who now is the college president, the P&HS degrees received official recognition from the chancellor's office in December 2011. Each major in the P&HS program has a 31-33 unit path of major courses, which culminate in a Certificate of Achievement. A student can add 27-29 units of general education courses and electives to receive an AA degree in their respective major (60 units)

THE PROGRAM AT A GLANCE

CURRICULUM:

The 2011 CAA grant enabled BCC to create two certificates of proficiency specifically for CAA students, which "stack" into the P&HS certificate pathways, as on-ramps to the AA degrees.

The Certificate of Proficiency: Public and Human Services Overview is 12 units, and includes a 1.5 unit foundations class that is adapted from the American College of Education curriculum (a program that develops professional skills for students and teachers), a contextualized English course, and a counseling course that helps students explore career interests.

The Certificate of Proficiency: Public and Human Services Systems is a 15-unit continuation of the first certificate, and delves deeper into foundational skills necessary for those working in the P&HS field.

The CAA curriculum is delivered through block scheduling, which allows students to take fewer courses that run for longer periods of time. Its certificates are recognized by the California Community Colleges system, but are not state recognized.

ENROLLMENT:

Although there is high demand for the program, cohort size, on average, is about 20 students. These smaller cohorts help foster peer relationships and allow for greater individualized staff and faculty attention.

FACULTY, STAFF, AND SUPPORTS:

Three part-time core faculty members, and a mix of several part-time and full-time multi-disciplinary faculty, provide instruction. This instruction is complemented by a range of supports that include a dedicated academic counselor, a general counselor, and a job developer for P&HS students. During orientation, a counselor meets with students individually to help them enroll and apply for a Board of Governors waiver (if applicable). Upon program entry, students may be connected to college support programs, such as Extended Opportunity Programs and Services and CalWorks. Where appropriate, students may be referred to local community-based organizations that provide wrap-around support services for high-need individuals. CAA students receive a registration form that streamlines class selection and locks registration for necessary classes.

RECRUITMENT:

Recruitment efforts target municipal agencies, such as public works and behavioral health departments, youth programs, charter and high schools, other BCC students, and community events. Word of mouth, through staff/faculty and alumni, draws many students. Additionally, there is a pathway from Berkeley High School to BCC that includes concurrent enrollment. Both the P&HS coordinator and the job developer interview each prospective student to ascertain background and goals.

COMMUNITY ENGAGEMENT:

At brown-bag lunches, guest speakers discuss professional development topics with students. Students value the opportunity to learn from and connect with field practitioners during these events. There also is an alumni network and an informal mentoring program. Further engagement of community partners comes in their critical role as employers of program graduates and as consultants on curriculum development.

OBSERVATIONS

OBSERVATIONS ON SUSTAINABILITY

By intentional design, BCC has functioned as a small, tightly-knit community since its inception in 1974. Until recently, one building composed the entire college campus (joined by a smaller ancillary building a few years ago). The idea of a community of practice, ingrained into the culture of the college early on, has only grown stronger over time. Most staff, faculty, and administrators work in the same building – a campus layout that facilitates frequent discussion and idea sharing. The college's long-time commitment to interdisciplinary and collaborative methods has facilitated CAA implementation and accelerated steps toward program sustainability.

OBSERVATION 1

Program Buy-In

The CAA and P&HS programs have substantial buy-in at all levels – from leadership, administrators, faculty instructors, and community partners – in large part through sustained and regular communication, case-making, and relationship management. Passionate and dedicated champions who have catalyzed the growth and development of the P&HS program include: the program coordinator, an expert on day-to-day operational issues; the college's director of special programs, who serves as a liaison between the program and the college; and Alameda County Behavioral Health, a municipal agency whose supports to the program include writing curriculum materials and aiding in outreach. Additionally, CAA staff members regularly attend academic department, curriculum committee, and student services and counseling staff meetings, and meet individually with all department chairs connected with P&HS. Although this connectivity – developed by core staff "from the ground up" – requires a substantial time commitment, it keeps parties across campus engaged and informed about P&HS and helps cultivate and sustain high-level program support. Core staff members also maintain good relationships with the college's public information officer, who disseminates news about the program through the college-wide newsletter and marketing materials.

At the same time, the program receives support from the highest administrative levels, with leadership articulating a commitment to continuing P&HS when grant funding ends. At the outset of the CAA grant at BCC, a vice president of the college spearheaded the initiative. This high-level commitment continues, and is reflected in leadership efforts to incorporate CAA elements into the college's formal strategic plan.

OBSERVATION 2

The Critical Role of the Job Developer

Somewhat unique among CAAs, BCC's program has a dedicated job developer on staff. Her tireless efforts have created robust employment opportunities for CAA participants. Her responsibilities include: cultivating relationships between P&HS and employers; assessing students' interests, goals, and strengths; and matching students with employers for internships and jobs. Starting largely from scratch, the job developer generated a list of employers in the area, and cold called them. While it was initially slow going, as P&HS gained reputation and respect in the local field based on student on-the-job performance, the outreach process started to reverse. Now, new employers contact P&HS with internship and job opportunities, eager to connect with the program. As a result, there are more job and internship opportunities available than there are students. In the job developer's words, "where relationships exist, the work will come." This evolution in program-employer relations is a sign that the program is sustainable, since employers respect the program and demonstrate a readiness to hire its graduates. Despite these successes, the job developer's position is at risk, as it is grant funded. Program staff and leadership recognize her crucial role, and are working to allocate resources to retain her. These retention efforts include connecting her position to funding from a new grant in the short term.

OBSERVATION 3

Staff Continuity and Support

Somewhat surprisingly, the P&HS program has experienced no staff turnover. Core staff and faculty have been at BCC since program inception. This staff continuity has great benefits for students – including the opportunity to engage with program personnel who possess deep knowledge of the program and its processes. Likewise, staff can draw on lessons learned from past cohorts to improve programs, rather than directing valuable time and resources toward the orientation of new staff. P&HS has been very fortunate to benefit from this faculty and staff longevity – a testament to the passion staff have for the program and the support that the college provides. High faculty retention rates likely also derive from the small and intimate nature of the college, with its one-building campus that serves less than 8,000 students. However, staff and faculty recognize that departures are inevitable. Planning for the future, and the sustainability of the program, BCC staff members are developing process documentation to standardize forms, while examining ways to ease the transition of new teachers and staff into the program. Providing adequate compensation to staff for planning time is another issue to address. All program faculty members have part-time status. Those who teach at least six units per semester receive compensation for one office hour per week – hardly adequate to cover what is required and what faculty regularly provide. Many CAAs at other schools compensate faculty, at least in part, to coordinate courses and conduct informal case management. Similarly, compensation to the program coordinator for administrative duties (set at three hours per week), falls far short of what is appropriate and necessary.

OBSERVATION 4

CAA's Generative Capacity

BCC staff and leadership view CAA as a "mother grant" with generative capacity to inform new initiatives and grants. Best practices learned from the CAA provide a framework, as BCC applies for other grants and initiatives, such as AB86, the Student Support Services Program, and the Career Pathways Trust. Using CAA experience as a springboard for these other initiatives provides BCC with a method to sustain key elements from CAA and to address the challenge of maintaining critical staff members who have been partially or fully funded through the CAA grant.

In another extension of CAA work, BCC, in partnership with Berkeley High School (BHS), is piloting a concurrent enrollment program with six BHS seniors. The students take a half-day of classes at BHS and a half-day of classes at BCC, which also includes study sessions and supports for the students. Concurrent enrollment is very difficult to implement, due to the need to coordinate administrative processes at both a high school and a community college, but BCC and BHS' long-term relationship has facilitated this pilot. This collaboration includes the cohort model and student supports that are part of CAA, and serves as a recruitment pipeline between the two institutions. This pilot work is helpful for AB86 in particular, as AB86 aims to expand educational and career pathways by requiring collaboration among high schools, adult schools, and community colleges. In addition, BCC received funding to support two 10-hour/week counselor positions for supporting developmental education students. These counselors will be funded through BCC, but will work with local high schools.

OBSERVATION 5

Additional Supports for Students

Despite the supports that the college provides, many students are high-need and would benefit from more wrap-around supports. Some of the main challenges that students face include finding childcare, affording transportation to classes, and being hungry. Staff and faculty have substantial face-to-face contact with students, and know that for some students, the lunch provided at brown-bag seminars is the only food they eat for the day. They have expressed a desire to partner with a community-based organization to provide food that regularly would be available for students. Staff members do what they can, including always having baked goods for student visitors, but this is done out of the passion and at the expense of individual staff members, who are only able to provide so much.

OBSERVATION 6

Managing Growth

The school is getting larger, and may face some challenges in scaling the program. Cognizant of challenges faced when a program grows too quickly, BCC is being deliberate and cautious with its growth. The college often uses piloting and prototyping to test growth opportunities, a strategy that innovation literature has shown to be effective. BCC may be funded by the Bay Area Workforce Collaborative to support scaling the CAA model. Currently, BCC is piloting the addition of 20 students to CAA programs.

LOOKING AHEAD

BCC is committed to sustaining the work of its Pubic and Human Services program. CAA is strong and deeply rooted in the college's cultural DNA. P&HS is one of nine learning communities on campus, all of which have similar core components: cohorts, faculty collaboration, interdisciplinary curriculum, learning community counselors, and service learning. Well positioned to tap into new funding initiatives, BCC still faces financial challenges. Grant-funded courses do not count toward productivity funding provided by the state on an enrollment-per-course basis. As a result, it becomes difficult to sustain CAA classes financially after moving off of grant funding, since these courses tend to be more expensive and have lower enrollments than the norm. Moving forward, BCC plans to identify strategies to overcome these challenges. In the past, this has included attaching courses to different grant funds.

CAA Case Study

DIABLO VALLEY COLLEGE

East Bay Region: Pre-Apprenticeship Program

Diablo Valley College launched its Pre-Apprenticeship Program in collaboration with local carpenter and laborer unions, with the aim of helping students succeed on gateway tests that lead to union apprentice positions and future work in the industry.

Diablo Valley College (DVC) is located about 20 miles northeast of Oakland in a bucolic, hilly setting. The buildings are a mix of old and new, with paths and stairs winding from one elevation to the next. The campus physical environment, coupled with the friendly demeanor of students and staff, evoke a small-town atmosphere. Students at Diablo Valley College ready themselves for transfer to four-year colleges, and pursue training for a variety of occupational and technical specialties.

OVERVIEW/CONTEXT

In 2010, DVC developed its Pre-Apprenticeship Program in direct response to needs articulated by local laborer and carpenter unions. Despite the availability of job opportunities for carpenters and laborers in the region, many prospective candidates could not access these opportunities, because they could not pass screening tests required to join apprenticeship programs. In response, DVC developed the Pre-Apprenticeship Program to provide prospective workers with the type of math, workplace, and other skills necessary to succeed on gateway tests, which in turn open up opportunities to pursue future careers as laborers and carpenters.

THE PROGRAM AT A GLANCE

CURRICULUM:

The Pre-Apprentice Program functions as an intensive, single-semester, nine-course, 21.8 unit CAA. Courses include an English lecture and lab, math, and physical education, all of which are contextualized. In the math course, all calculations are relevant to the trade. The contextualized physical education course requires students to carry cement bags, ascend ladders, and undertake other physical tasks required of laborers. Since prospective employees must pass a physical before hiring, the contextualized physical education course plays a dual role of preparing students for on-the-job tasks and job screening. Four classes focus on aspects of construction, teaching students the skills for apprenticeships in various laborer unions. Once a week, the student cohort applies skills learned in the classroom to a real-world job setting. Given the overall intensity of the curriculum, a move to a two-semester instructional approach is under consideration.

ENROLLMENT:

The CAA enrolls an average of 17 students per cohort, per semester. To be considered part of the CAA cohort, students must enroll in three courses: construction, contextualized physical education, and counseling/orientation. This gives students scheduling flexibility to enroll in appropriate-level English and math classes, without losing the peer-to-peer support and benefits of a cohort approach.

FACULTY, STAFF, AND SUPPORTS:

Two full-time faculty cover technical instruction and three part-time instructors cover other content. A dedicated counselor helps students navigate the college process, although at the time of this writing, that position stood vacant (due to a staff departure), with the workforce development manager covering responsibilities on an interim basis. Financial aid and other monetary supports have varied over time. Students currently shoulder tuition costs (formerly covered by special grant funding). However, staff members help students apply for and receive a Board of Governors waiver, which waives enrollment fees for students who receive government benefits or have particular financial needs. The first two CAA cohorts received tools and boots. However, this support had to be discontinued in the absence of ongoing grant funding. To defray the cost of books, the program maintains a book library where students can check out course books for free.

RECRUITMENT:

CAA coordinators conduct outreach to one-stop career centers, continuation high schools, the athletic department, and send mail to DVC students at or above a certain math level. DVC also engages with a community-based organization to recruit students from the Monument Corridor, a high-need neighborhood near DVC. Additionally, coordinators hold information sessions for prospective students. As more students successfully complete the program and find employment, word of mouth and alumni connections have played a helpful recruitment role – directly, and by bolstering the program's overall reputation.

JOB PLACEMENT:

Given the program's origins, there have been strong ties to various local laborer unions since its inception. Industry and union personnel serve on advisory boards and help students prepare for work through mock interviews and other activities. Students often interview and receive job offers before graduation. During the third cohort graduation, several students had to leave early in order to start their first day of work, while many others started the day after graduation. Union representatives were on hand to interview some of the students who did not yet have placements. The shift of program funding from CAA to the Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant has placed staff in contact with the Workforce Development Board, which also assists with job placement.

OBSERVATIONS

OBSERVATIONS ON SUSTAINABILITY

There is strong external and internal support for DVC's Pre-Apprenticeship Program. Given the program's originating impulse (a response to demands from local unions) and its impressive track record with job placement, there is little question about program need or efficacy. Within the college, program champions are mobilizing to foster program continuity – addressing both financial and policy issues that will have an impact on program longevity.

OBSERVATION 1

Multi-level Champions

Teamwork among staff, faculty, and leadership – so crucial to the program's implementation – will be a key factor in addressing program sustainability once CAA funding concludes. The program's two full-time faculty champions, who teach the core construction courses, provide pedagogical leadership and champion the program on the instructional level. Staff and administrative leadership are similarly invested. In particular, a senior dean, who formerly oversaw the CAA grant and the Pre-Apprenticeship Program, is addressing how to apply lessons learned from CAA programs to upcoming initiatives. Staff, faculty, and leadership all agreed that champions on multiple levels must be in place if the challenges of sustainability are to be successfully addressed.

OBSERVATION 2

Financial Hurdles

To support institutionalization, DVC funds some costs associated with the Pre-Apprenticeship Program through newly emerging grants and state initiatives. As "early adopters" of many of the underlying tenets of these new initiatives, DVC hopes to leverage its experience both to connect with resources and inform policy development. DVC has successfully leveraged TAACCCT and Perkins Fund resources to support the Pre-Apprenticeship Program. The college also plans to leverage and fund CAA work through upcoming initiatives such as AB86 and California Career Pathways Trust – given the strong alignment in goals between CAA and these initiatives. Beyond funding, staff and leadership also see the potential that CAAs have to affect policy in these initiatives, given their focus on improving adult education in California through pipelines between high schools, adult schools, and community colleges, as well as developing and improving adult education programs in high-need areas. The CAA framework has been effective in supporting career and technical education students (particularly high-need students) and can inform implementation of AB86.

DVC has made a concerted effort to move the program to general funding, a critical move toward institutionalizing the CAA and moving away from "soft monies." General apportionment funds currently support CAA instructional costs, and as CAA courses go through local and state curricular processes for approval, staff and leadership express confidence that the Pre-Apprenticeship Program courses will be ready to be placed in the 2015-16 college catalog as a Certificate program.

Paid coordination time for part-time faculty may be a more difficult program element to sustain in the aftermath of the grant, even though it is recognized as an important CAA success component. Paid coordination time helps facilitate faculty collaboration with respect to curriculum development, and allows faculty to conduct informal case management. Leadership are looking for ways to sustain this paid time, not only for the CAA, but for other learning communities as well. Another financial challenge is covering costly student "start-up costs," such as proper attire. During the first cohort of the program, participants received necessary supplies – for the program and their future jobs – including hardhats and steel-toed boots. In this field, steel-toed boots are both mandatory and expensive (approximately $200 for a reliable pair). Although permanent equipment that stays at the college, such as saws and drills, can be paid for through a variety of funding streams, materials that students take with them are less easily covered. Such costs are particularly difficult for low-income, high-need students to shoulder without supports.

OBSERVATION 3

Validation through Adaptation

Adoption and adaptation of elements of the CAA program by other DVC programs and departments, and by community partners, bodes well for institutionalization. Within the college, the business administration department is revising its Office Professional Certificate of Achievement program to incorporate elements of the CAA program, including the cohort model and contextualized math and English courses.

Similarly, aspects of the CAA model are being taken up at Mt. Diablo Adult School, a nearby educational institute, which already had a relationship with DVC via its early childhood education CAA program, entitled Project Access. Mt. Diablo is developing a bridge to that program for its students, incorporating aspects of the Pre-Apprenticeship Program. Not only does this adaptation strengthen Project Access' recruiting pipeline (without it having to invest resources), it also disseminates CAA elements to other local institutions.

OBSERVATION 4

Cohorts and Curriculum

Ensuring adequate levels of math course enrollment presents an important, but addressable, challenge to continuing the CAA through general funding. When students enter the Pre-Apprenticeship CAA, they take a math placement test that determines their math level. With the support of grant funding, DVC has provided low-enrollment math classes that appropriately target the math level of program participants. (In contrast, most non-grant funded courses are paid through "productivity," which is based on how many students enroll.). If enrollment in this math course remains closed to only Pre-Apprenticeship students, enrollment may not reach sufficiently high levels for the class to sustain itself. Conversely, if enrollment is opened to those outside the CAA, teachers may be challenged to teach students at multiple levels and contextualize instruction. Whatever strategy is pursued, faculty suggested that a one-on-one math tutor could be a valuable supplement to CAA math instruction, as this is a subject area of significant struggle for most students.

OBSERVATION 5

Institutional Memory and Staff Turnover

Establishing processes to maintain CAA institutional memory, in light of faculty and leadership transitions, remains an important area of focus for DVC. In the past year, the program has faced significant turnover (with several part-time instructors finding full-time employment elsewhere). Two core staff are new, as well as all three of the contextualized basic skills professors (math, English, and physical education). The absence of veteran staff hampers effective orientation of new instructors. In response, efforts to create process documentation are underway, with the aim of preserving institutional memory and leaving a legacy of procedures and policies that new staff members can reference in the absence of mentors. Similarly, faculty are streamlining and formalizing course syllabi to facilitate information transfer. Also, faculty suggested that CAA responsibilities should be written into future job position announcements, to aid in faculty outreach and recruitment. That way, if CAA faculty members leave the college or position, it will be easier and quicker to find a suitable replacement.

LOOKING AHEAD

Well respected by employers and students, DVC's Pre-Apprenticeship CAA has support from key leadership and faculty. To sustain the program, staff and leadership plan to focus on several key areas: maintaining the contextualized math course which is crucial for Pre-Apprenticeship students; retaining talented faculty members who can teach contextualized math, English, and physical education courses; and identifying financial resources for the program through new grants, and by moving the program to general apportionment funding.

CAA Case Study

EL CAMINO COLLEGE

South Bay Region:
Welding CAA

El Camino College's Welding CAA has helped it to forge deeper bonds with the local manufacturers, including the aeronautic manufacturers industry; strengthen its short-term college career pathways; and build support in the delivery of contextualized developmental education.

El Camino College has had a more than 60-year presence in the South Bay Region of Los Angeles County. Located in Torrance, CA, the eighth largest city in the county, the college serves a diverse population, providing both academic and career training to more than 25,000 students. The region has deep roots with the aeronautic manufacturers industry. El Camino College derives its name from the Spanish term for "the road," and refers to California's first road, "El Camino Real."

OVERVIEW/CONTEXT

El Camino offers three Manufacturing Career Advancement Academies – Welding, Machine Tool Technology, and Air Conditioning and Refrigeration. All three CAAs developed in direct response to the employment needs of local industries, and took root through a partnership between the deans of the Community Advancement and the Industry and Technology divisions. The director for Career Pathways from the Community Advancement division oversees the CAAs, which are housed under the Industry and Technology division. The director coordinates with deans from Industry and Technology, Mathematics, and Behavioral and Social Sciences to recruit students, coordinate student supports, and address course scheduling and selection of instructors.

THE PROGRAM AT A GLANCE

CURRICULUM:

The Welding CAA is a one-semester program, which includes three courses: Basic Welding, Basic Arithmetic Skills, and Strategies for Success in the Workplace. Graduates of the CAA receive a local certificate from El Camino's Business Training Center, and a nationally recognized OSHA 10 Certificate. Initially implemented as a one-year program, the Welding CAA was revised to a one-semester program during its second year – addressing student need to return more quickly to the workforce. Another redesign is underway, which will further streamline the program to an eight-week course of study. Students attend class Monday through Thursday. On Friday, for the first eight weeks, students participate in workshops (including a Green Generalist workshop developed by Purdue University's Technical Assistance Program), undertake team-building activities, go on job tours, and attend industry conventions. Math instruction, an especially strong program component, is contextualized, with content and instructional approaches developed through a close collaboration between the math and welding instructors.

ENROLLMENT:

Participants enroll as cohorts of up to 29 students in one semester. Prospective students must attend an orientation prior to program commencement.

FACULTY, STAFF, AND SUPPORTS:

The director carefully oversees the selection of instructors for CAA classes, working with the respective deans to identify and retain instructors who understand the program, have a sense of the students' needs, and tend to "think outside of the box" in terms of how to best support student learning. To date, instructor personality has been a significant factor in the success of the math course. A peer mentor (a graduate of the CAA) is assigned to each class, and is tasked with taking attendance, providing supports, contacting absent students, and facilitating group camaraderie and peer-to-peer connections. Students also have access to all of the support services provided by the college while enrolled in the CAA. In addition, the program supplies welding equipment and text books to students free-of-charge

RECRUITMENT:

The CAA advertises its programs to high schools, as well as to current students, making use of campus email blasts. Referrals from local employers provide another avenue for recruitment.

JOB PLACEMENT AND TRAINING PATHWAYS:

CAA graduates either continue with their education, enrolling in El Camino degree programs, or seek entry-level employment in welding or other manufacturing positions (for example, entry into the local pipefitters union). The CAA provides supports for either pathway, including FAFSA completion assistance or supporting former CAA students in taking the LA City Certified Welder exam by buying them the study book (approximately $400 to purchase).

OBSERVATIONS

OBSERVATIONS ON SUSTAINABILITY

El Camino College is a comprehensive college that offers both Industry and Technology degrees, as well as degrees in other academic areas. The CAAs, in general, assist with El Camino's overall student completion agenda. The CAA complements several of the college's strategic initiatives, including enhancing teaching to support student learning through the use of a variety of instructional methods and services; strengthening quality educational and support services to promote student success; and developing and enhancing partnerships with schools, colleges, universities, businesses, and community-based organizations to respond to the workforce training and economic development needs of the community. College leaders view the CAA as a natural fit - given its links to the mission of the college and its capacity to engage aerospace industry companies located in the region. The CAA also allows El Camino to strengthen its short-term college-career pathways.

OBSERVATION 1

Completion Rates and Student Success

The Welding CAA likely will continue as a short-term college-to-career learning community with student cohorts and contextualized learning, because the deans of Industry and Technology, Mathematics, and Behavioral and Social Sciences have embraced its goals and have seen evidence of its value. From Fall 2011 through Fall 2014, 144 students have completed the CAA. Administrators also value CAAs, in part, because they tap into populations that do not traditionally attend El Camino and facilitate student success once enrolled. Administrators cited the California Community Colleges Board of Governors' Student Success Task Force goals aimed at improving graduation, certificate, and transfer rates, and took note of the ways the CAA fits in well with the state's strategy to focus more deeply on student completion.

Deans allocated instructors to teach the three welding CAA courses, because those students count toward their FTEs (full-time equivalents) and the CAA Welding students pass at the same rates, if not higher rates, than non-CAA students. Administrators also identified the CAA as a learning community that addresses a developmental education-to-academic program pipeline problem for students who have to take multiple development education courses, and often drop out before completing those courses. Instructors in the program cited the increased emphasis on contextualization and collaboration as key contributors to student success.

OBSERVATION 2

Contextualized Instruction

The CAA provides El Camino with a strong model for assisting students with acceleration through developmental education courses, laying the groundwork for the creation of other contextualized courses at the college. Welding, for example, requires measurement and blueprint reading, which call upon the use of math skills that often challenge students. Math lessons are presented with welding examples, and there is an emphasis on the application of math to real-world welding skills where measuring, fractions, and decimals are a strong focus. There have been discussions on how to further contextualize math in other industry and technology majors because of the Welding CAA's success with contextualized math instruction, and because emerging data suggest that students who go through accelerated courses fare better than students who take a more traditional developmental education track. The mathematics department recently created accelerated developmental education courses that place a greater emphasis on contextualization as a means to help more students pass these pre-academic major requirements.

OBSERVATION 3

Dean and Faculty Champions

From the outset, the Welding CAA has benefited from high-level support, with the director overseeing much of the coordination necessary to foster collaboration among deans from different academic departments. The director, well respected by colleagues, and well placed within the overall college administrative hierarchy, orchestrated the buy-in of many departments. Over the long term, much of this crucial coordination will need to be passed on to permanent staff, if the program is to fully institutionalize. This labor-intensive work – which promotes collaboration internally, among deans and faculty, and externally with local industry – is an especially difficult program component to sustain financially.

While there is high-level support for the program among academic deans, the presence of strong faculty with the capacity to deliver high-quality contextualized instruction and creatively chart new curricular ground has been a critical factor in program success to date. In addition to designing lesson plans that incorporate math basics into real-world work scenarios, the math instructor often sits in on the welding course and regularly communicates with the welding instructor about student concerns and progress. This practice, so crucial to program success, will be sustained as long as the "right" instructors are in place.

The college already had experience and success with learning communities, such as the First Year Experience and the Puente Project Program. This history helped create a frame of reference that allowed faculty and staff to understand more readily the goals and objectives of the Welding CAA, which some characterized as a "learning community for tech students." This association facilitated faculty buy-in, as the CAA's value could be well understood in the context of the demonstrated successes of similar learning communities.

OBSERVATION 4

Program Supports

Once the grant ends, some of the supports provided will cease, unless alternative grant funds can be secured. A highly valued element of the CAA is the grant-funded financial supports it provides to students to cover costs associated with supplies and other fees, which may be out of the financial reach of target program participants. Going forward, students may have to purchase their own welding supplies and equipment for their welding course, pay certification-testing fees, and shoulder the cost of study manuals. Students currently pay $46 per unit for the Welding CAA, and can receive financial aid. The peer mentors will be sustained as long as work-study slots remain available.

LOOKING AHEAD

As El Camino College mobilizes to build on the success of its Welding CAA, it will be important to consider issues of faculty professional development, so the college can grow the pool of instructors who are skilled at collaboration and contextualized learning. The Welding CAA program was substantially abetted by the presence of dynamic, innovative instructors with the capacity to forge relevant lessons and keep students engaged. It cannot be assumed that all faculty members are skilled in this work, nor that they naturally incline to embrace it. Equally important will be finding ways to continue the crucial work of program coordination in the absence of dedicated funding.

CAA Case Study

WEST HILLS COLLEGE LEMOORE

Central Valley Region: Maintenance Mechanic CAA

With a mandate to meet the changing economic and academic needs of its community, West Hills College Lemoore revamped its maintenance mechanical offerings, introducing an entirely new model for curriculum development, delivery, and support.

The West Hills College Lemoore campus is located 30 miles south of Fresno, CA. It is separated by a highway overpass and on-ramps from the town of Lemoore, and is surrounded on all sides by arid and fallow tracts of farmland. Aside from the middle and elementary schools sharing the campus, its only neighbor is a processing plant for Leprino Foods, a dairy products manufacturer purported to operate the world's largest mozzarella plant. In the wake of a debilitating drought, the local economy has contracted, as once common agricultural jobs disappear and more farmland goes unused. Adjusting to this shifting economic landscape, West Hills College Lemoore has embraced a mandate to meet the economic and academic needs of the community. Increasingly, its priority is to prepare students for employment and educational opportunity.

OVERVIEW/CONTEXT

Historically, Lemoore provided most career and technical education (CTE) offerings on a contract basis on behalf of local industries. Employers approached the school with skills they hoped to develop in employees, and paid the school to deliver training. The development of the Maintenance Mechanic Career Advancement Academy at Lemoore marked a departure from this model for career training, with the school offering a sustained, semester-based program of study targeted toward a non-traditional student population – those over 30 years of age who have been underemployed or out of work for an extended period of time.

In launching its Maintenance Mechanic CAA, Lemoore also was guided by an awareness of projected workforce patterns. In a statistic frequently cited by industry leaders and educators, an estimated 60 percent of current maintenance mechanic workers will age out of the workforce within the next decade, creating new demand for skilled workers.

THE PROGRAM AT A GLANCE

CURRICULUM:

Launched in 2009, the six-unit program includes eleven courses that run on a block schedule. Starting in Spring 2014, the program shifted from a two-semester, block-scheduled program to an intensive, one-semester program – reflecting a perception shared by faculty, administrators, and students that the curriculum would be more effective when delivered via a condensed timeline. It now meets for four and a half hours per day, four days a week. Participants receive a low-level certificate upon graduation, which became district-recognized in Spring 2014.

ENROLLMENT:

With a capacity to enroll 20 students, the program has had steady enrollment since its inception. Despite increasing demand for the program, the college lacks resources to fund more than one section per semester.

SPECIAL FEATURES:

Upon program entry, students take two placement tests, the WorkKeys and the CASAS. While there is no cut-off score for program eligibility, the pre-tests help the coordinator and instructors identify where students will need additional support. Post-program administration of the CASAS (relatively uncommon among CAAs) makes it possible to track basic skills development. Skills gains have varied across cohorts, despite faculty seeing consistent gains in math skills. However, in Fall 2014, a new approach used to incentivize effort on the test found an average growth of over five grade levels among participants for math, and over a one grade level increase in reading.

FACULTY, STAFF, AND SUPPORTS:

Two instructors co-teach the courses, with support from a vocational aide. In addition, an agricultural counselor, housed on a separate campus, assists students with accessing financial or other supports, and with filing for their certificates. A business accounts specialist is embedded in the class twice a week to support students with their work and job search. He also leads a three-day course on resume writing, interview preparation, and job search basics to help students find employment. A grant-supported program coordinator addresses recruitment, record keeping, staffing issues, and participant intake.

RECRUITMENT:

The grant coordinator oversees recruitment. Efforts include flyer placement on campus and networking with employers (a fruitful venue for recruiting plant workers in lower-level, unskilled positions who seek advancement). Crucial and substantial help comes in the form of referrals from the Fresno County and King County Job Training Organizations (JTOs). While the college can capably train students, it is less skilled at marketing to them. Staff and administrators underscored the degree to which the program's operational success has been tied to this referral pipeline.

PARTNERSHIP/COLLABORATION WITH INDUSTRY:

The program launched in response to industry need, and during its launch, the college kept industry partners well informed about the CAA's development through outreach and networking – from the vice chancellor for workforce development and Lemoore's business accounts specialists. Although industry leaders had no formal involvement in curriculum development, they had the opportunity to review program content and express approval. Lemoore reports that industry leaders continue to express satisfaction with the program – verbally, and through their readiness to employ Lemoore CAA graduates at higher rates than students from other programs.

JOB PLACEMENT:

The program does not guarantee job placement, but students have had little difficulty finding work. The college has invested heavily in maintaining close relationships with industry partners. The primary role of the business account specialist is to maintain contact with industry partners to keep them abreast of program offerings at the college, to learn about their unmet training needs, and to find out about job openings and internships.

OBSERVATIONS

OBSERVATIONS ON SUSTAINABILITY

In many ways Lemoore seems poised for long-term success and sustainability. Enrollment is robust, buttressed by a strong recruitment pipeline forged through savvy partnership building, program participants who readily find employment, and feedback loops to ensure ongoing, responsive program development. While exceptional teamwork on the part of faculty and staff has allowed the program to develop and thrive, this may not be sufficient to secure the CAA's long-term future without addressing issues of high-level program advocacy and faculty funding.

OBSERVATION 1

Program Visibility, Success, and Support

Lemoore's Maintenance Mechanic CAA has flourished as a "quiet success" – achieving impressive benchmarks related to enrollment and job placement, while operating somewhat "under the radar" of the larger college community. While Lemoore lacks a formal process by which decisions are made to sustain or jettison programs, the college carefully weighs its programs against two criteria: whether programs are reaching their enrollment targets and whether students achieve success, within the program and with regard to employability outside of the program. In the case of the Maintenance Mechanic Program, the program is hitting the mark in both respects. Yet, it may be insufficiently visible to those who could most aggressively and effectively advocate for its long-term support, an implementation feature that may pose a threat to the program's longevity and institutionalization. The program's under-the-radar status also results partly from structural issues: program oversight and management reside in the district office in Coalinga, with Lemoore providing the classroom space and other resources on campus. Further, since courses occur at night, to accommodate working student schedules, news of the program's success has been slow to circulate within the larger college community. Despite these impediments, the program's reputation continues to grow.

OBSERVATION 2

Curriculum Vetting

With the support of the Career and Technical Education faculty, a comprehensive curriculum review of the Maintenance Mechanic Program is underway. This could help pave the way for the establishment of Maintenance Mechanic as a formal program at the college. All programs of study at the college undergo this curriculum review process every five years. The process necessitates a full vetting of the curriculum to demonstrate that it aligns with identified student learning outcomes. The grant coordinator has been leading this process, developing student learning outcomes, soliciting feedback from employers about the program of study, and incorporating the guiding principles of contextualized basic skills and cohorting into the program structure. Over the long term, the college is considering extending the program into a for-credit, state-recognized course of study.

Since the success of an institutionalized program will rest primarily on its ability to prepare students effectively for marketplace opportunities, employer feedback from the curriculum review provides an essential building block in the quest for sustainability. Initial findings from the review point to the need for increased cultivation of "soft skills" and troubleshooting abilities among potential employees. Guided by the grant coordinator, curriculum adjustments are under consideration to ensure that training effectively responds to employer needs.

OBSERVATION 3

Feedback Loops-Labor Market Data

Increased analysis and tracking of labor market data by program staff is helping to shape the CAA program for maximum efficacy. School administrators report that they've adopted a much more strategic approach to monitoring program fit and need. Labor market data, according to program staff, increasingly drives program decisions and provides an important complement to the information emerging from the curriculum review.

This data is mined to understand what program expansions could better meet employment demand, and which program components link to shrinking sectors and therefore need to be reconfigured. This use of labor market data connects directly to the college's goal of meeting the needs of the community, not just current students.

OBSERVATION 4

Faculty Salaries and Instructional Continuity

While the college is committed to sustaining the program for the foreseeable future, there is no clear plan in place to cover faculty salaries once grant funding ends, nor is there a mechanism to recruit and train new instructors. Student fees would be insufficient to cover salary costs, and it is unlikely that salary support will come from the college's general fund, as stakeholders generally see the need for the program to become self-sustaining. No concrete plans have been formalized, but the idea of returning Maintenance Mechanics to a contracted basis has been under consideration by the college. This would provide necessary funding for the course, while still offering the training and instruction valued by employers. However, it is unclear whether a contracted program would serve the same type of non-traditional students recruited to the CAA.

Beyond issues of salary support, the program will need to grapple with concerns related to faculty recruitment. Effective teaching in a CAA program mandates a special combination of technical knowledge and teaching talents, not easily replicated or replaced. The program's two lead faculty members have played a central role in the program's success. Finding similarly qualified faculty for CTE programs has been a challenge at the college. It has proven difficult to find individuals who have both the necessary technical expertise and the pedagogical knowledge to convey material effectively to non-traditional student populations. While Lemoore has been able to successfully leverage its relationships with industry to staff programs, its ability to do so in the future is not guaranteed. A statewide or national network of qualified instructors would be useful in addressing this professional readiness gap, suggested one administrator.

LOOKING AHEAD

Working as a team, faculty and staff have shown considerable resourcefulness and ingenuity as they have created a new program. Their ability to leverage community resources – for example, building a strong recruitment pipeline through essential partnerships with JTOs, and through the proactive work of the business accounts specialist – has allowed frontline staff to build the program in a cost- and resource-efficient manner, even in the absence of a high-level champion. As described by a staff member, the dedicated team at Lemoore has in essence created a feeder system, akin to the minor leagues for employers in the region, resulting in a mutually beneficial relationship. Employer input guides curriculum development, so it is relevant and useful, while the college develops a strong job placement pipeline for graduates. For all these accomplishments, going forward, Lemoore will need to grapple with institutionalization challenges related to internal program advocacy, funding, and faculty development.

CAA Case Study

MADERA CENTER

Central Valley
Region: Maintenance
Mechanic CAA

At the outset of the CAAs, Madera Center was developing a manufacturing building on campus, having worked closely with local industry to identify unmet employment needs. Building upon initial investments, the school used CAA funding to establish a new program that mutually benefits students and local employers.

Madera Center, located 25 miles northwest of Fresno in Madera, CA, is a community campus of Reedley College. The region, which is predominantly rural and agricultural, suffers from double-digit unemployment, high rates of poverty, and low levels of educational attainment. The Center opened in 1996, and offers comprehensive, innovative programs in transfer/general education, occupational education, and developmental education. Madera Center houses the Maintenance Mechanic Career Advancement Academy, which is the focus of this case study.

OVERVIEW/CONTEXT

While Madera Center has been in existence for nearly 20 years, its manufacturing programs are relatively new. Madera's Maintenance Mechanic Program launched in 2008, as part of a larger campus effort to expand career and technical education (CTE) offerings, particularly in manufacturing. Historically, such high-cost, resource-intensive programs had only been available at the main Reedley College Campus. In 2009, Madera opened its Center for Advanced Manufacturing, a brand new, 8,000 square foot facility on campus dedicated to serving manufacturing programs.

The Maintenance Mechanic CAA is taught in this facility, which allows students and faculty easy access to classroom, workshop, and office space under the same roof. Students and instructors can transition seamlessly from classroom learning to hands-on practice, simply by exiting the classroom onto the workshop floor. Given the short timeframe of the program, and its instructional intensity, such flexibility is key to effective curriculum delivery.

THE PROGRAM AT A GLANCE

CURRICULUM:

The program operates as an intensive, 18-week course of study, providing students the basic knowledge and hands-on training necessary for entry-level employment in industrial maintenance. Students complete 11 courses (8.5 units) in areas such as industrial safety, technical report writing, and electrical fundamentals. Upon program completion, students receive a district-recognized Certificate of Completion. Additionally, Madera pays for students to sit for the Manufacturing Skills Standards Council Safety Certification, an industry-recognized certificate in manufacturing. Courses meet four days a week, four hours per day, via block scheduling.

ENROLLMENT:

Instruction in manufacturing is a resource-intensive, hands-on endeavor that requires access to costly industrial machinery and close oversight by faculty. While the program's stated cap of 30 is considered unwieldy for manufacturing instruction, this has yet to become an issue, as course size typically has been below 20. For instance, in Fall 2014, 10 students enrolled in the program.

CONTEXTUALIZED LEARNING:

Madera integrates math and English-language instruction into areas of its manufacturing courses to address basic academic skills deficits of participating students. The curriculum was developed in conjunction with faculty from two other local community colleges, Reedley and Fresno City. A faculty member at Fresno City, knowledgeable about industrial technology and the industry's entry-level employment needs, identified the core programmatic components. Once the content was established, the manufacturing faculty partnered with full-time English and math instructors to embed math and English content within the curriculum. For example, worksheets tie instruction on fractions to the measurement of industrial plant parts.

FACULTY, STAFF, AND SUPPORTS:

The campus employs one full-time instructor as the program's key technical instructor and three adjunct teachers (who have additional teaching responsibilities in other programs). Peer-to-peer cohorts, contextualized learning, and embedded tutoring provide additional supports. A dedicated CAA grant coordinator has multiple roles: student recruitment, partnership building with employers, community outreach, and student support and counseling. Students develop "soft skills" through classroom visits by industry professionals, a technical writing class (which includes resume preparation), and mock interviews.

RECRUITMENT:

Student recruitment happens through many channels, including well-established partnerships with Adult Probation, and the Workforce Development Office. The CAA grant coordinator, the primary face of the program to the community, has many recruitment-related roles, including developing promotional brochures and guiding students through the matriculation process (application, placement test, and on-line orientation). Clearing these requirements is a challenge for some students, but the program views it as a weeding process, and as an indicator of motivation and participant readiness.

"STACKING":

Until recently at Madera, employment was the primary pathway following CAA certificate completion, as the campus lacked more advanced programs of study in manufacturing. To better meet employer needs (e.g., workers with more advanced skills), and to address the limitations in the Maintenance Mechanic employment pathway (which only prepares students for entry level jobs, such as operator), Madera is developing several other program options that would provide opportunities for follow-up, higher-level training. These programs include a Welding certificate that stacks to an associate's degree in Welding (introduced for the first time in Spring 2014), and a Manufacturing certificate (planned for Spring 2015) that will stack to an associate's degree in Machine Tool.

PARTNERSHIP/COLLABORATION WITH INDUSTRY:

A robust partnership exists between the program and industry professionals. An advisory committee, actively engaged from the outset of the program's launch, has guided curriculum development, evaluated equipment, and made purchase recommendations. Members have visited classrooms and reviewed student work.

OBSERVATIONS

OBSERVATIONS ON SUSTAINABILITY

Madera Center already was on the path to developing manufacturing programs when the CAA initiative launched. In partnership with industry, the school had identified an unmet need to train individuals for manufacturing, and was in the process of developing its manufacturing building on campus at the outset of the CAAs. Expanding on initial investments in manufacturing, the school used CAA funding to establish its first program of study. Its early commitment to establishing partnerships with industry, thoughtful leveraging of funding opportunities, and the baseline dedication of core staff have played a role in program growth and development. The program is poised for future growth, especially as many of its foundational ideas about instruction and student success are being taken up by other program areas at the college.

OBSERVATION 1

Support from Frontline Staff vs. High-level Administrators

The champions for CAAs at Madera have been more heavily concentrated in frontline staff, industry, and community partners than in the administration and leadership of Reedley College. The program coordinator and instructor have worked diligently to form the CAA in true collaboration with industry partners. For instance, they have kept an advisory committee engaged throughout the development and implementation of the Maintenance Mechanic CAA. Partners inside and outside of the campus agree that these strong partnerships must be maintained and nurtured going forward.

At the same time, as a college center, Madera is under the leadership and oversight of Reedley College. Due to staffing reorganizations and some position vacancies, there has been a leadership vacuum at Madera in recent years. A vice president, placed at the campus midway through the second phase of the CAA initiative, introduces the possibility of higher-level administrative on-campus support. Additionally, having a vice president on campus has provided more capacity to support the work than previously. He has reconnected Madera Center with local employer associations, which the frontline staff regularly did not have time to do.

OBSERVATION 2

Repositioning CTE

Madera Center as a whole is in discussion about supporting a student success plan. Lessons from the CAA have been a focal point of that conversation, with CTE firmly at the center of the vision for the campus. At its core, Madera views itself as a public access institution, and therefore sees its mandate as providing students of all levels and abilities with opportunities to succeed academically and obtain employable skills. CTE, and particularly manufacturing, had not always been viewed as part of this mandate. But, based on an enhanced understanding of employer needs, and a series of grant funding opportunities, Madera Center now is firmly committed to providing CTE and manufacturing pathways as opportunities for its students.

Leadership, including the board of trustees, describe providing these pathways as part of the school's mission. Further, the current focus on student success across the state is providing an external pressure that is helping ensure that many of the student-focused tenants from CAAs are incorporated into other programs as the CTE division scales out. While administrators have been concerned about the cost of manufacturing programs, and their ability to hit enrollment targets, there is cautious optimism that completing the manufacturing pathways will aid student interest and enrollment, and therefore make these programs self-sustaining.

This repositioning of CTE could prompt other realignments at Madera. Historically, Madera CTE faculty had stronger connections with CTE faculty and programs at neighboring campuses, than with faculty and programs across the Madera Center campus. This pattern, to some degree, may be an artifact of the leadership structure at Madera. However, as a result, silos across campus have yet to be broken down, in line with the theory of action for CAAs. With the statewide focus on student success, there is evidence that this too may be shifting.

OBSERVATION 3

Staffing and Job Placement

While administrators regularly acknowledged the central importance of the coordinator's role in making the CAA a success, this position, and the student supports it provides, was not formalized in plans to sustain CTE programs. Administrators admit that if grant funding ends, the position likely would as well. While Madera would work to find another campus department to place the coordinator, likely within the counseling division, her responsibilities would not focus solely on the CAA. This raises questions about the long-term effectiveness of the manufacturing programs at Madera.

To date, students who completed the Maintenance Mechanic CAA have had limited success in landing industry jobs, despite the fact that there is industry demand for employees. The college hopes that by strengthening pathway offerings, students will obtain more skills and become more employable. However, the employability gap for current graduates may be as much a function of capacity limitations for program staff to connect students with employment opportunities as it is an issue of students not being sufficiently prepared for work. While the physical elements of the manufacturing programs may be put in place with plans to sustain these programs, it is not clear that Madera could attract students long-term without a high placement rate for its early graduates.

OBSERVATION 4

Leveraging Investments

Since program inception, Madera has used each prior investment as a springboard to additional funds aimed at supporting manufacturing pathways on campus. Following CAA funding, the college secured some Trade Adjustment Assistance Community College and Career Training grant funds from the Department of Labor to support the broadening of manufacturing on campus. In addition, in Summer 2014, Madera secured additional funds from the California Division of Workforce and Economic Development's Industry-Driven Regional Collaborative-Economically Distressed Areas grant, which cemented Madera's ability to equip the remaining advanced manufacturing programs. Alone, none of these resources would have been sufficient for Madera to establish such a comprehensive manufacturing program. However, by keeping a sustained focus on expanding existing investments, the Center, over a period of several years, created from scratch a complete manufacturing pathway for students.

OBSERVATION 5

Campus-Wide Impact

Spillover effects of CAA practices are emerging across the campus. In some ways, the future of manufacturing programs on campus may be viewed only as part of the legacy of CAAs at Madera. Several departments, including math, English, and philosophy now use embedded tutors in their core courses. Additionally, the campus has created a career and transfer center, with a counselor dedicated to helping students connect with employment or ongoing educational opportunities. In addition, leadership is working to establish for-credit apprenticeships for CTE students with local employers. Finally, a faculty member from the English department is currently on leave, studying how to accelerate and contextualize developmental English instruction at the school. While all these efforts cannot be attributed directly to the presence of the CAA at Madera, they provide indicators that the initiative is part of a movement that is transforming the ways community colleges support and educate students. For many faculty and staff, the program elements central to CAAs are becoming accepted as best practice.

LOOKING AHEAD

Extending and supporting the work of faculty, the grant coordinator has played an especially important role at Madera, working tirelessly on behalf of the program and wearing multiple hats. She is part recruitment specialist, and part counselor (assisting with registration, financing, transportation, and tutoring support) and even supplements the embedded tutor by helping students with their math work. This level of personalized attention requires close collaboration and substantial time investments by faculty and staff. Going forward, it will be essential to address investments in human capital, as necessary complements to the investments in physical capital that have allowed Madera to build a fairly well-equipped manufacturing program.

CAA Case Study

SKYLINE COLLEGE

San Mateo Region: Automotive Technology CAA

Skyline College's Automotive Technology CAA has augmented and strengthened an existing program by expanding pathways to higher-wage careers, addressing recruitment and retention challenges, and providing additional opportunities in higher education.

Located about 15 miles southwest of San Francisco, in San Bruno, Skyline College overlooks the town of Pacifica, providing breathtaking views of the Pacific Ocean from some campus areas. The college is deeply committed to serving the local community through open access, a student-first philosophy, partnerships with local community-based organizations, and on-campus services that both students and community members can access. More than 17,000 students enroll annually in a broad range of affordable day, evening, weekend, and online courses. Many students complete lower division general education requirements to transfer to four-year colleges and universities to earn a bachelor's degree. Other students graduate and achieve an Associate in Arts or Associate in Science degree. Skyline College offers a variety of nationally acclaimed career technical education programs.

OVERVIEW/CONTEXT

Skyline College had a well-established Automotive Technology program in place when it launched its Automotive Technology Career Advancement Academy in response to the economic recession. Automotive shops of various sizes populate the surrounding area, providing potential employment opportunities for local residents and a strong incentive to develop an automotive program that meets community and student needs. The Automotive Technology CAA addressed some of the existing program's access and retention challenges by providing an alternative training pathway.

The Automotive Technology CAA's more abbreviated curriculum offers students the opportunity to obtain a Certificate of Specialization in one semester and start an entry-level job quickly. The CAA creates the possibility for stacked certificates (a sequence of certificates that build on each other to allow for an increase in qualifications over time) and latticed certificates (certificates that give students foundational skills needed for a variety of pathways). This has bolstered enrollment and persistence in the original program. After completing the CAA, many students continue in the full traditional automotive technology course of study.

THE PROGRAM AT A GLANCE

CURRICULUM:

Students undertake a one-semester, five-course, 18.5-unit program that bridges to three different pathways in the college's existing automotive technology program. The five CAA courses include a contextualized English class dedicated for Automotive Technology CAA students (this is opened to the general population if it does not fill); a contextualized math course; an automotive basic skills course; a counseling seminar focused on college and career exploration and preparation, designed specifically for Automotive Technology CAA students; and a personal financial planning course. In addition, students attend a mandatory one-day orientation at the beginning of the semester.

Students receive a Certificate of Specialization for completing the CAA program. The curriculum is kept up-to-date via input from an advisory board that includes local employers and through faculty visits to nearby shops, where they monitor equipment usage and technical upgrades.

TRAINING PATHWAYS:

Completing the CAA can lead directly to an entry-level position at an auto shop, but it also serves as one of three pathways funneling into the college's automotive technology program. At the intermediate level, students can take a variety of 15-unit courses (including drive train technology, engines, brakes, steering and suspension, and electricity/electronics), which prepares students for respective Automotive Service Excellence certificate tests, widely accepted by industry. The courses taken at the intermediate level also apply to advanced-level coursework and degree attainment. Students are eligible for an AS degree in automotive technology after completing 45 units in the automotive major and 19 units of general education.

ENROLLMENT:

Prospective students complete a standardized application used by all CAAs at Skyline College. Average cohort size is between 20-25 students. Currently, admission to the Automotive Technology CAA is selective – for the Fall 2014 cohort, Skyline College received almost three times as many applicants as it had the capacity to admit.

FACULTY, STAFF, AND SUPPORTS:

The core automotive class in the CAA is taught by full-time faculty, the English class is taught by adjunct faculty, the mathematics and business classes are both taught by full-time faculty, and the counseling class is taught by either full-time or adjunct faculty. CAA program staff, coordinators, and campus resources, such as SparkPoint, provide supports for students.

A SparkPoint presentation, where students are introduced to services and resources, is embedding into the CAA orientation. SparkPoint at Skyline College also hosts a food pantry on campus. Embedded tutors (tutors who are in the classroom) are used for English and math. A full Career Services Center helps students prepare for successful entry into the workforce.

RECRUITMENT:

Recruitment is a collaborative effort that involves staff and faculty from multiple departments, as well as Skyline College's outreach department. Deans across the college are intentional in this cross-departmental collaboration. Recruitment strategies include visiting local high schools and adult schools, and inviting students from these schools to Skyline College for CTE career days, campus tours, and special events. Collaboration between staff from student services, marketing, and college outreach departments; faculty from the automotive department; and high school and adult school partners are crucial in implementing these recruitment strategies. NOVA (a federally funded employment and training agency) distributes program marketing materials, refers candidates to the program, and provides additional wrap-around supports for co-enrolled participants. As the program has gained reputation in the region, word of mouth plays an increasingly important recruitment role.

JOB PLACEMENT:

Through the hard work of faculty champions, the Automotive Technology CAA has developed strong relationships with employers. When the program began, it struggled to find jobs for CAA students. A faculty member reached out to many employers and identified two who signed on to provide mentorships. Job offers for some of the mentored students soon followed. From this successful relationship with just two employers, employer connections and CAA student placements grew. Now, employers reach out to the program with job openings for students rather than the reverse. The program also introduced an optional cooperative learning course, where employers hire paid interns on a limited-term contract. If students perform well, they may be offered permanent employment.

TEAMWORK:

Full and part-time CAA faculty benefit from professional development and collaborative planning opportunities. This includes a weekly meeting, where faculty coordinate class materials, conduct informal case management, and work together on joint projects. The teamwork and communication extends to the leadership level. Deans across the college meet to plan learning community class schedules – to ensure that times and locations of these classes sync for students who wish to take them – to discuss faculty placement and hiring, and to provide student support.

OBSERVATIONS

OBSERVATIONS ON SUSTAINABILITY

Skyline College finds itself uniquely positioned to address CAA sustainability issues. Its president is an acknowledged thought leader in the field, a long-time champion of CTE programs, and a seasoned strategist in addressing issues of program longevity. The key to sustainability of the CAA at Skyline College is the integration of the program into the regular aspects of the institution. The classes are supported by general fund resources, so when the grants went away, the college had already incorporated the expenditures in the regular budgeting and planning processes. The technology needs are incorporated in the regular college instructional equipment processes.

The facilities are included in the overall district facilities master plan and Capital Improvement Program that allow for the expenditure of local bond dollars and state capital dollars to support the program. Additionally, faculty and staff are supported with grant writing resources that are part of the regular grant development processes. Student support services are provided by the college, and the program and the participant needs are incorporated in the overall college Student Equity and Student Success Programs that are required and funded by state categorical resources.

The program is so integrated and woven into the fabric of the college that it is not viewed as a "program on the side." Instead, it is a permanent program that feeds seamlessly into the existing automotive technology degree and certificate program. Integration into the college is only part of the key to sustainability. The program is connected to the larger network of CAAs.

OBSERVATION 1

Framework Adaptation

Other programs at Skyline College and at nearby colleges have adopted elements of the Automotive Technology CAA framework, thereby validating the overall program model and extending its reach. The successful implementation of a CAA in automotive technology provided a framework for other CTE programs at Skyline College to have CAAs. Consequently, Skyline College now has CAAs in allied health, early childhood education, and paralegal (piloted in Fall 2014). In addition, there are more than a dozen learning communities at Skyline College. Program representatives often meet to share information and advance practice.

CAA coordinators have enthusiastically shared findings about the work. As a result, aspects of the program – such as accelerated courses and contextualization – have found their way into CTE and other program offerings. Some of this knowledge has informed program development at other community colleges. For example, a nearby community college drew upon Skyline College's pathway approach when developing an early childhood education program, offering tiered learning opportunities culminating in certificates that stack toward more advanced study.

OBSERVATION 2

Strategic Planning and Positioning

The CAA model has been further supported as college departments refine their strategic plans, often incorporating key CAA program concepts into their foundational planning and communication documents. Skyline College administrators recognize that CTE and transfer models are not as different as some colleges perceive, and believe that their fuller integration can and should be fostered to the benefit of students. The stacked and latticed certificates, which are a key element of CAA programs, provide a way for students to progress both academically and in careers. A former high-level administrator at Skyline College institutionalized the CAA model by writing some of its concepts into the automotive department's strategic plan. These concepts have since spread to other department plans and program reviews. This diffusion of elements of the CAA model into other departments reflects buy-in from the wider institution.

The course catalog and class schedule serve as additional vehicles for the strategic positioning of CAA programs. All CAA programs already appear in these publications, characterized as learning communities, and posted alongside other learning communities (which receive their funding through general apportionment).

OBSERVATION 3

Funding Opportunities

Skyline College is well positioned to tap into new grant opportunities that will allow it to sustain and further develop its CAA commitment. For example, the US Department of Labor's Trade Adjustment Assistance Community College and Career Training Round 5 funding requires linking CTE with further academic programming. Skyline College's overall culture and structure lends itself naturally to the goals of this grant, as does its commitment to CAAs. Skyline College also will align CAA with Student Services & Support Program (SSSP) funding, as CAA students are a target audience for the counseling goals of SSSP.

There are also private foundation funding opportunities, including support from the Bay Area Workforce Funding Collaborative. To develop proposals for these grants, faculty and staff are supported with grant writing resources that are a part of regular grant development processes.

OBSERVATION 4

Program Continuity and Knowledge Transfer

Anticipating the retirement of a key faculty member in 2015, staff members mobilized to minimize the potential negative impact, taking advance steps to facilitate program continuity. The retiring faculty member played a crucial role in developing and sustaining employer relationships. Recognizing the importance of deepening the breadth of employer-college relationships, he has involved multiple faculty members in employer engagement, so these relationships persist after he retires. Another faculty member now participates in employer site visits and meetings to foster a seamless transition and build trust. The current faculty member developed a database with employer contact information, in order to maintain and institutionalize relationships, which now includes more than 500 employers. Skyline College has established a Career Center, which provides resource support in maintaining and expanding databases. This resource support eases the burden on faculty members, and offers a reliable point of contact for employers.

LOOKING AHEAD

Sustainability does not appear to be an issue with this CAA, due to Skyline College's culture and its long-standing commitment to career preparation in the automotive field. Instead, Skyline College may want to focus on developing capacity to expand program offerings. More automotive jobs are currently available than there are graduates, and demand for the program currently exceeds supply. This provides an opportunity to expand the program's capacity in order to meet the demand of both employers and prospective students. As the program has become more popular, it has begun to outgrow the capacity of the one lead math instructor. In anticipation of possible program expansion, efforts are underway to offer interested math instructors the opportunity to teach courses in the CAA program.

APPENDIX

CAAs IN THE 2013-14 SCHOOL YEAR – PARTICIPATION AND OUTCOMES SUMMARY

In this appendix, we provide a brief update on the outcomes Career Advancement Academy (CAA) students are experiencing.

We utilize data from the California Community Colleges Chancellor's Office (CCCCO) to examine what types of students are participating in CAAs, and what academic outcomes they experienced during the 2013-14 academic year.

ABOUT THE DATA

2013-14 marked the first school year the evaluation relied solely on data reported to the Chancellor's Office Management Information Systems (COMIS) to identify CAA participants. This is important for four reasons:

- Because the CAA special population flag is a relatively new element in COMIS, enrollments are likely systematically underreported. For example, from 2007-2013, the match rate between CAA participants identified by colleges and COMIS records was 62 percent system-wide, and this varied across regions from 35 percent to 80 percent.
- COMIS data is much less detailed than the CAA program data colleges were previously submitting to the evaluation. COMIS records contain information on student major, if declared, but this field is missing or does not reflect a CAA pathway for over half of students. We therefore cannot distinguish in which CAA program(s) participants were enrolled.
- Due to a shift in how the data were processed, we are unable to link the 2013-14 academic year records to the prior evaluation data sets. We therefore do not know which students in the 2013-14 data set persisted from an earlier year, nor do we know what academic milestones these students may have already achieved. As a result, this appendix presents a snapshot of students over the course of a single year. In terms of outcomes, we are limited to examining persistence from the Fall of 2013 to the Spring of 2014, since we do not know if students enrolled in Spring 2014 continued their education. Similarly, the certificate and degree information should be interpreted with caution, since we do not have information on the expected time to completion for students' programs of enrollment.
- Finally, COMIS only records system-recognized credentials. We therefore have no information on lower-level certificates that many CAAs provide students.

CAA PARTICIPANTS

Just under 1,000 students across 16 colleges participated in CAAs in the 2013-14 school year, according to COMIS records.

While this represents a small number in comparison to the full California Community Colleges system (see Table 1), it indicates that CAAs are continuing to reach a sizable student population.

Since inception, CAAs have enrolled nearly 10,000 students across 30 colleges. To understand more about who these students are, we examined student enrollment in relation to gender, age, race, and ethnicity, and financial aid receipt across the four CAA regions.

CAAs continue to serve a diversity of students.

In all four regions, CAA participants are mostly minority.

Hispanics represent the largest ethnic group served by CAAs, constituting 53 percent of enrolled students in the 2013-14 school year, which is a higher proportion than for the California Community Colleges system overall. African American students also constitute a sizable portion of the student body, though this varies by region – in Central Valley, just six percent of students are African American, while nearly a third are in El Camino.

CAA students also varied in gender across regions.

Overall, the genders were represented nearly evenly, but this varied widely between regions. In San Mateo, the vast majority of participants were female, while the reverse was true for El Camino. This may be a reflection of the types of CAA programs offered within regions, as a central purpose of CAAs is to offer programs that meet local training and educational needs.

Table 1. Characteristics of CAA and Community College Students, 2013-14

	Region				All CAAs	California Community Colleges System
	Central Valley	East Bay	El Camino	San Mateo		
Number of CAA Students	633	251	56	21	961	2,310,321
Gender						
Male	49%	46%	78%	19%	49%	46%
Female	49%	37%	16%	81%	45%	53%
Age						
Under 25 years	53%	35%	61%	57%	49%	57%
Race/ Ethnicity						
Hispanic (any race)	61%	36%	46%	43%	53%	40%
African-American	6%	27%	30%	10%	13%	7%
White	3%	3%	5%	19%	3%	29%
Asian	8%	6%	0%	19%	7%	11%
Other/ unknown	22%	28%	19%	9%	24%	13%
Financial Aid						
Pell grant	18%	0%	25%	0%	14%	N/A
BOG Recipient	36%	0%	38%	0%	26%	N/A

The 2013-14 cohort of CAA participants was significantly less likely to receive financial aid than its predecessors.

This year, just 14 percent of CAA students were Pell Grant recipients, down from 42 percent of students from 2007-13.

Similarly, the proportion receiving Board of Governor (BOG) fee waivers, which indicate students qualified for financial aid, and/or received CalWorks, Supplemental Security Income, General Assistance/Relief, or met the criteria for other income relief programs (e.g., Veterans Affairs dependent fee waivers), decreased from 63 percent to 26 percent in the most recent school year. Again, this may be a reflection of the types of programs currently being offered by CAAs. As some short-term programs may not be eligible for financial aid, this may be lowering recipient rates among the current cohort.

CAA OUTCOMES

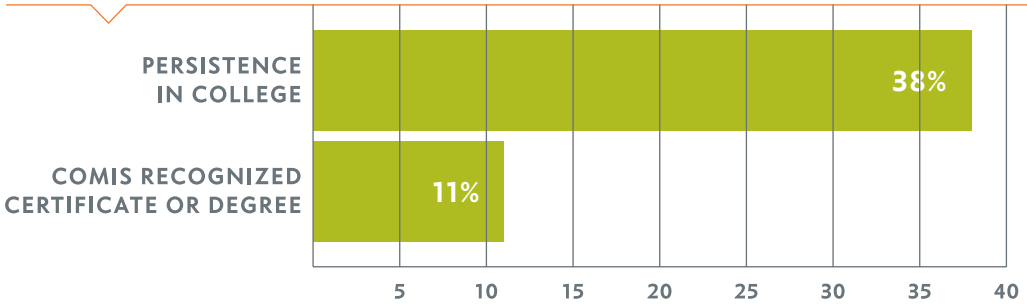
Over one-third of CAA students persisted from the fall semester of 2013 to the spring semester of 2014 (Figure 1).

Due to data matching limitations, we were only able to look at persistence for the fall term, since we do not yet have access to data from the fall of 2014.

While this is lower than the historical rate of 76 percent, it is for a shorter period. Additionally, persistence in CAAs is not a precursor to completion in many cases, as it is with traditional degree programs, as many CAA programs are short-term offerings designed to get students in, get them trained, and get them back into the workforce. According to the 2011-2012 CAA survey, more than 40 percent of CAA programs were one semester or less in length from entry to certificate-receipt. Therefore, the persistence rate may be understating CAA students' academic performance, if they in fact completed a certificate within one semester.

There are similar limitations with interpreting the completion rate for CAA participants. Eleven percent of students in 2013-14 CAAs received a credential that is recognized by the state system, but this figure does not include local or industry-sponsored credentials that often are provided to graduates of CAA programs. The 11 percent rate is, therefore, also likely an underestimation of the completion rate of CAA programs.

FIGURE 1. PERSISTENCE AND CERTIFICATE RATES FOR CAA PART



There is no evidence that CAAs are more effective at serving certain types of student populations than others.

To investigate whether academic outcomes varied across students, we examined persistence and credential-receipt rates by gender, age, and race and ethnicity (Table 2).

There are no significant differences in persistence or credential attainment rates by race and ethnicity, or by age. We did find that women in the fall 2013 term were more likely to persist to the spring term than men, but this may be a reflection of program length, as they were marginally less likely to have received a system-recognized credential in either term.

Table 2. Academic Outcomes by Student Characteristics

	Persistence	System-Recognized Degree or Certificate
Number of CAA Students	239 (38%)	105 (11%)
Gender		
Male	29%	11%
Female	47%	8%
Age		
Under 25 years	36%	9%
Race/ Ethnicity		
Hispanic (any race)	39%	8%
African-American	30%	12%
White	43%	13%
Asian	41%	14%
Other/ unknown	47%	12%

Taken together, these findings suggest CAAs are continuing to address unmet needs in their communities. They are effectively reaching and enrolling often underserved populations. The steady enrollment numbers also support this supposition, as student demand is often a good indicator of program utility. Due to data limitations, the conclusions to be drawn about academic outcomes are more limited. Similarly, without systematic collection of employment outcomes it is difficult to state conclusively whether CAAs are meeting their objective of transitioning students into "jobs with a future."