ACCELERATING SUCCESS:

Turning Insights into Action for Foster Youth at California Community Colleges







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About Educational Results Partnership

Educational Results Partnership (ERP) is a 501(c) (3) nonprofit organization that is data-informed, employer-led, and equity-focused. The organization is committed to improving outcomes across all levels of education – from Pre-K through career – with a focus on promoting student success in college and in attaining living-wage jobs. Our work focuses on identifying successful educational systems, practices, programs and policies in public education that are getting the best results for students, and fostering collaboration across academia and business to replicate success. ERP partners with educators, policymakers, business leaders and nonprofit organizations to improve educational productivity.

Cal-PASS Plus, funded by the California Community College Chancellor's Office, is an accessible, actionable and collaborative Pre-K through career system of student data. The system and initiatives are managed through a partnership between San Joaquin Delta College and ERP. Cal-PASS Plus's mission is to provide actionable data to help improve student success along the education-to-workforce pipeline. Collaborating using data informs instruction, helps close achievement gaps, identifies scalable promising practices, and improves transitions. Cal-PASS Plus offers longitudinal data charts, detailed analysis of transitions and workplace outcomes, information and artifacts on promising practices, and comparisons among like universities, colleges, K-12 school systems and schools.

- James S. Lanich, Ph.D., President and C.E.O

About California College Pathways

California College Pathways is a public-private partnership dedicated to creating a seamless system of support for foster youth as they transition from high school to colleges and universities and as they work towards their post-secondary goals. The work of California College Pathways focuses on supporting foster youth in four important areas on their path to success:

- EQUIP foster youth with the knowledge, skills, and supports to pursue their college and career goals.
- ENROLL foster youth in a postsecondary degree or certification program that prepares them for gainful employment.
- EARN a college degree or certificate.
- EMBARK on a career path.

California College Pathways (CCP) supports research to better understand foster youth experiences to and through college, including the identification of systemic barriers and effective practices to support this important student population. The network of campuses, and the funders and practitioners who support them, use research findings to support the continuous improvement of post-secondary, secondary and child welfare systems through actionable data, training and technical assistance, as well as to engage in advocacy and policy implementation efforts that strengthen the connections between research, policy and practice that can improve the experience of foster youth. - Debbie Raucher, Project Director, John Burton Advocates for Youth

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Acknowledgements

The report was made possible through the support of several partners who provided funding and/or expertise. These partners include:

- John Burton Advocates for Youth
- Stuart Foundation
- May and Stanley Smith Charitable Trust
- Marcled Foundation

The research was made possible with support from these key partners that established a foundation for data collection and use among California Community Colleges and Universities and the Foster Youth data dashboard on Cal-PASS Plus:

- Walter S. Johnson Foundation
- · Pritzker Foster Care Initiative

This report was developed by April Allen of Educational Results Partnership, with contributions from the following ERP staff members: Alan Chan, Anthony Dalton, Holly Fisackerly, James Lanich, Devin Moynihan, Elliott Rice, Ken Sorey, and Jackie Volkoff. Elisabeth Cutler from the May and Stanley Smith Charitable Trust, Alexia Everett from the Stuart Foundation, and Debbie Raucher from John Burton Advocates for Youth gave incredibly helpful feedback on the analysis and this report over the course of several months. This report has been greatly strengthened because of their insights.

We are grateful to Mark Courtney from Chapin Hall at the University of Chicago and Nathanael Okpych from University of Connecticut's School of Social Work, who provided invaluable feedback on study design and interpretation of results.

We are also deeply indebted to the California Community College Chancellor's Office, local community college leaders, and foster youth program staff who generously shared their experiences in serving foster youth. This report would not have been possible without their assistance. In particular, we thank the six bright spot colleges identified in this report:

- · College of the Canyons;
- De Anza College;
- Evergreen Valley College;
- Fresno City College;
- Los Medanos College; and
- · Reedley College.

Finally, this report is dedicated to foster youth who bring a wealth of knowledge, persistence, and unique experiences to our community colleges, and who overcome difficult institutional barriers and life challenges in order to succeed.





California College Pathways Policy Milestones

Several interrelated state and federal policy initiatives are changing the landscape of youth experiences in foster care and higher education. Foster youth programming at California community colleges began in the early 2000s with the emergence of Guardian Scholars programs. In 2006, the Community College Chancellor's Office launched the Foster Youth Success Initiative (FYSI), which identified a foster youth liaison at each community college to provide students with a point of contact for resources and support. From there, the number of colleges hosting a program has grown exponentially, with some maintaining the Guardian Scholars title and others adopting their own program names.

In 2014, Senate Bill 1023 created a dedicated source of state funds for supporting foster youth at up to 10 community college districts. This program, the Cooperating Agencies Foster Youth Educational Support (CAFYES), began operation in Spring 2016 and is currently in place at 26 colleges under the program name NextUp. Further bolstering these efforts was the provision in 2014–2015 of \$70 million to colleges in Equity funding by the State, and \$140 million annually thereafter, a portion of which has been used by some colleges to expand support dedicated to foster youth.

Subject matter experts have identified that 78 of California's 114 community colleges now have some form of targeted, dedicated support program for foster youth. Other institutions have at a minimum a designated point of contact for foster youth identified through the FYSI. Other benefits to enable foster youth to enroll in and complete college include access to priority enrollment in classes and priority access to on-campus housing, where available.

California adopted extended foster care to age 21 for youth engaged in school or work activities through Assembly Bill 12, implemented in 2012. This legislation provides supports for foster youth through housing, case management, and other resources. These services provide a safety net for vulnerable youth as they pursue educational opportunities.

Together, these legislative changes and programs underscore the growing momentum to eliminate systemic barriers to foster youth academic success.

BACKGROUND

In October 2015, California College Pathways (CCP) released a ground-breaking report on the state of foster youth success in California community colleges and universities called *Charting the Course: Using Data to Support Foster Youth College Success.* The report highlighted institutional level data from a subset of community colleges and universities within the CCP network. The data provided insights into important momentum points for foster youth and compared outcomes to non-foster youth on the campuses across four domains:

- Are foster youth students Equipped to start college with the skills and resources needed?
- Are foster youth students Enrolled in college from high schools, in support programs to help them succeed and in enough and the right courses?
- Are foster youth students reaching key milestones and ultimately Earning degrees, certificates or transfers?
- And ultimately, are foster youth Embarking on living wage careers upon completion of a degree or certificate?

These milestones are critically important. The U.S. Department of Labor reports that individuals with only a high school diploma earn more than \$20,000 less per year than individuals with a bachelor's degree and are twice as likely to experience unemployment. Given our changing economy, it is crucial that foster youth obtain a post-secondary credential to secure stable and sustainable employment. Community colleges are the predominant post-secondary pathway for vulnerable students: one study found that 85 percent of foster youth attend community colleges as their first enrollment in post-secondary education.

Charting the Course provided an insightful description of foster youth outcomes at 19 community colleges (and 12 universities). The analysis highlighted metrics commonly tracked by colleges and universities on student progression and outcomes. These included, but were not limited to, placement into remedial coursework, course success rates, persistence term-to-term, receiving financial aid and college grade point average. Generally, the data pointed to several metrics on which foster youth had worse outcomes than their peers, and to areas where campuses could focus more effort or bolster available resources for these students.

Building on What We Learned

This current report is intended primarily to provide local college staff, faculty and administrators with data to better understand foster youth performance and how to better support foster youth outcomes. The findings also provide insights for improving policies locally and statewide to help remove barriers to foster youth success in completing college.

This report builds on the foundation established by *Charting the Course* by providing:

- Updated descriptive outcomes reflecting data two years after the initial report, using many of the same metrics:
- A deeper analysis using several statistical methods to pinpoint milestones and momentum points that are predictive of foster youth success;
- Analysis that links specific program practices and college policies with foster youth outcomes; and
- A qualitative investigation and description of possible promising practices found at "bright spot" colleges, from which other colleges can gain insight and action.

While Charting the Course focused only on colleges that are part of the CCP network, this report represents all foster youth and incorporates outcome data for all 114 community colleges in California within one academic year through data from the Cal-PASS Plus system. As foster youth identification is based largely on self-report through the community college application, it is important to note that the number of foster youth represents a wide range of foster care experiences. It includes students who remained in care through early adulthood, along with those who may have exited the foster care system earlier via reunification, adoption or guardianship.

This report serves as a foundation for understanding institutional structures, policies, and practices that can support improved educational outcomes for foster youth. Future work will expand on these findings to track student outcomes over time (through community college to the labor market), share the experiences of foster youth, and provide measurable benchmarks that connect promising practices to student success. This is only the beginning.

As noted in the methodology, predictive analyses involving high school data were truncated to a smaller cohort of approximately 600 students with four years of high school data included in Cal-PASS Plus. See Technical Appendix for more information.

Methodology:

This report draws on three major analyses to highlight pathways and predictors of foster youth success.

- I. A descriptive and predictive analysis of quantitative data on foster and non-foster youth outcomes from the Cal-PASS Plus data system
 - Descriptions of community college outcomes are primarily drawn from the cohort of foster youth who enrolled for the first time in 2015–2016, and have been disaggregated by race, gender, and foster youth status.
 - For analyses involving high school data, the population of foster youth students was truncated to a sample of students with four years of high school data in the Cal-PASS Plus system of data.
 - Predictive analytics were used to identify factors that were associated with foster youth student success, including course success, persistence term-to-term, and completion of a certificate, degree, or transfer to a four-year university. Data for these analyses draw on the 2012–2013 cohort of foster youth enrolled for the first time in a California community college.
- 2. A survey of institutional policies and foster youth programs at 69 of the 114 California Community Colleges
 - A survey of foster youth liaisons and support program staff at California community colleges was conducted between March and May 2017. The survey, administered online, was sent to the primary contact for foster youth at each of California's 114 community college campuses.
 - The survey asked about both institutional characteristics and services specific to foster youth. The
 purpose of the survey was to assess the institutional factors and program practices in place to
 support foster youth at community colleges.
 - Out of the 114 colleges, 69 provided complete responses (61 percent response rate).
 - Responses were aggregated to report trends across colleges and were also used in exploratory
 predictive analyses to identify any relationships between institutional or program practices and foster
 youth educational outcomes.
- 3. A multi-method analysis that used quantitative data to identify colleges that had better than expected outcomes for foster youth ("bright spots") and incorporated qualitative interviews to uncover promising practices
 - Statistical techniques (latent class analysis) were used to identify bright spot colleges that were differentiated from other colleges based on key academic outcomes, including 30 credit completion within an academic year. The student outcome data included all students identified as foster youth in the campus data system, not only those served by a specialized foster youth support program.
 - A total of II colleges were identified as bright spots using this methodology. Of note, bright spots
 are examples of schools that were differentiated based on student outcomes, but other colleges have
 demonstrated success for foster youth on some key metrics.
 - Six of these colleges were selected for in-person interviews with foster youth program staff and
 college leadership. Promising practices identified in these interviews are identified in orange headers
 and orange text boxes throughout this report.

See Technical Appendix for additional details about the methodology for this report.

EQUIP

Foster Youth Student Demographics

There were approximately 23,500 foster youth students identified in the California Community College system in the 2015–2016 academic year. At the time of *Charting the Course* in 2014, there were 13,400 foster youth identified across all colleges. This increase is due in large part to better identification, but may also represent an actual increase in the number of foster youth attending community colleges with support from extended foster care. Historically, most colleges have relied solely on students self-reporting their foster youth status upon application. However, an increasing number are now also using other sources of data to increase the accuracy of identification (for example, financial aid applications, Extended Opportunity Programs and Services (EOPS) rosters, and foster youth program participation).

This report primarily focuses on the characteristics and educational outcomes of two cohorts of foster youth who enrolled at a California community college for the first time in 2012–2013 or 2015–2016. Table I shows the demographics for the 3,922 foster youth students that make up the 2015–2016 cohort.

There are some key differences between groups of students who self-identified as foster youth and those who did not. For example, female foster youth are enrolled in community college at higher rates than male foster youth (54 percent compared to 45 percent). The non-foster youth student population has approximately equal representation across genders. There are also several key differences in the racial makeup of these student populations: African American students make up almost one-fifth of the foster youth student population, but only six percent of the non-foster youth population. Conversely, Asian students make up less than five percent of the foster youth population, compared to approximately 14 percent of non-foster youth students. White foster youth are also under-represented in the community college population, but this largely mirrors the trend for non-foster youth. These patterns may speak to differences in educational access as well as disparities in child welfare contact.

TABLE 1: Demographics of First-Time College Students, by Foster Youth Status (2015-2016)

| | | Foster Youth | | Non-Foster Youth | | CA General Population ³ |
|--------------|-------------------------------------|--------------|-------|------------------|-------|---------------------------------------|
| | | Number | % | Number | % | % |
| All Students | | 3,922 | | 294,618 | | |
| Gender | Female | 2,123 | 54.1% | 145,965 | 49.5% | 50.3% |
| | Male | 1,750 | 44.6% | 145,064 | 49.2% | 49.7% |
| | Unknown Gender | 49 | 1.2% | 3,589 | 1.2% | N/A |
| Race | African American | 701 | 17.9% | 17,406 | 5.9% | 6.5% |
| | American Indian or Alaskan Native | 56 | 1.4% | 1,292 | 0.4% | 1.7% |
| | Asian | 189 | 4.8% | 39,725 | 13.5% | 14.8% |
| | Hispanic | 1,772 | 45.2% | 137,848 | 46.8% | 38.9% |
| | Native Hawaiian or Pacific Islander | 18 | 0.5% | 1,427 | 0.5% | 0.5% |
| | Two or More Races | 294 | 7.5% | 12,427 | 4.2% | 3.8% |
| | Unknown Race | 28 | 0.7% | 7,648 | 2.6% | N/A |
| | White | 864 | 22.0% | 76,845 | 26.1% | 37.7% |

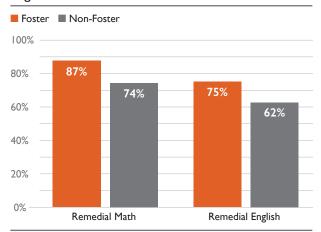
²The 2012–2013 cohort will be highlighted later in this report in predictive analyses that require following students across multiple academic years. Demographic details for the 2012–2013 cohort are available in the Technical Appendix.

³Source: US Census Bureau, 2016 population estimates.

Remedial Course Placement

As noted in *Charting the Course*, a large proportion of foster youth may be less prepared for college coursework than their peers. Based on a sample of colleges in 2012–2013, the report found that foster youth were more likely to enroll first in a remedial course in math, English or ESL courses rather than a transfer-level course. These trends hold true in data from all community colleges in 2015–2016, with foster youth enrolled in remedial coursework at higher rates than non-foster youth for both math and English (see Figure 1).

FIGURE I: Students Enrolled in Remedial Math and English Courses



Promising Practices to Prepare Foster Youth for College

Bright spot colleges illustrated several practices that may be helpful in increasing the number of foster youth who are prepared to enter college. Several colleges had formal dual enrollment programs, allowing high school students to receive credit for taking community college classes. More informal collaborations included frequent conversations between community colleges and their feeder high schools to ensure alignment between high school and college curricula for the benefit of all students, including foster youth.

This report did not set out to study preparation prior to college, but it is instructive to understand how specific high school experiences inform foster youth success in community college. High school GPA, receiving a standard diploma (instead of a GED or not graduating), and the number of times a foster youth changes high schools proved to be predictive of student success at community college. High school factors influencing later student success will be discussed in greater detail later in this report.

Prep Jams: COLLEGE OF THE CANYONS

College of the Canyons offers summer "Prep Jams" in math and English for all students. These sessions often span a week or more to help students fill academic gaps before taking courses or a placement test, and are open to first-time and returning students. To provide some flexibility for working students, these "Jams" are often offered in the morning and early evening.



Novel Approaches to Meeting Emergency Housing Needs: FRESNO CITY COLLEGE

Fresno City College collaborates with community partners to address housing needs for foster youth students. The diversity of collaborative partners allows a variety of interventions for students with emergency housing needs. Such interventions can include providing limited funds for emergency hotel stays and linkage to outreach workers to assist students with finding permanent housing. Going forward, Fresno City College plans to collaborate with a local hotel chain to provide hotel stays for foster youth students (paid with NextUp funding) without requiring the customary credit card deposit.



Providing Foster Youth with Concrete Supports

Foster youth require significant concrete supports to meet their daily needs. These students may not be able to draw on family members or other networks for financial support. Charting the Course highlighted potential missed opportunities for foster youth to access financial aid. At bright spot colleges, staff assisted students with completing paperwork and answered students' questions during the financial aid application process. Evergreen Valley College has a foster youth program staff member accompany prospective students to the financial aid office. Staff at College of the Canyons highlighted their attention to ensuring foster youth understand the responsibilities and the opportunities of financial aid. Importantly, involvement in financial aid processes allows college program staff to build relationships with foster youth while they are still enrolled in high school, and to continue to support them should financial aid issues arise after enrollment.

Helping youth find and maintain affordable housing was a major concern of all interview respondents. Bright spot colleges devoted substantial resources to help foster youth with housing costs. Reedley College has on-campus housing available and gives foster youth students priority for this housing. While most bright spot colleges identified working with community partners (such as county child welfare agencies and community-based housing programs), Fresno City College is exploring new ways to ensure emergency housing is available for foster youth students in need (see box).

Aside from financial aid for tuition and housing, foster youth require significant financial and in-kind safety net resources to persist and succeed in post-secondary education. Bright spot colleges mentioned providing grants and emergency funds to students as "last dollar" financial assistance to fill funding gaps that remain after scholarships, grants and loans. Four of the six colleges that were interviewed – College of the Canyons, Evergreen Valley College, Fresno City College, Reedley College – provided foster youth with textbook vouchers, meal cards, bus passes, and other supports, drawing on NextUp and other funding to provide these resources. Several program staff mentioned connecting foster youth to CalFresh to receive Supplemental Nutrition Assistance Program (SNAP, e.g., food stamp) benefits.



Equipping Faculty and Staff with Skills and Knowledge to Support Foster Youth

Bright spot colleges devoted substantial time and resources on working with faculty and staff to help make the campus a supportive place for foster youth. Los Medanos College and College of the Canyons provided training for faculty and staff to become more aware of the unique needs of foster youth and other vulnerable populations (see box). Other approaches included general training on trauma and behavior intervention and integration of social-emotional learning into the classroom. College leaders were in consensus that informing instructors about the needs and challenges of foster youth greatly enhances the academic experience and success of their students. Of note, training and support for adjunct instructors was an area of significant concern for many colleges, particularly the need to engage part-time faculty in professional development opportunities.

Supporting Faculty to Engage Diverse Learners: COLLEGE OF THE CANYONS

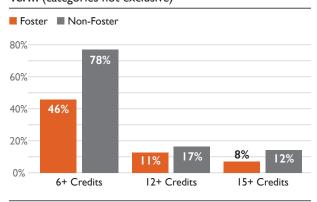
College of the Canyons provides a training sequence for faculty to understand the needs of foster youth and other special populations at the college. Through up to 54 hours of training, faculty learn about instructional strategies that can be used to engage these students, and make connections with needed resources. College leaders incentivize faculty participation in training activities by creating cohorts of staff who complete a training sequence together and receive a ten percent pay increase upon completion.

ENROLL

Course Attempts

As shown in Figure 2, foster youth attempt 6 or more credits in the first term at substantially lower rates than non-foster youth. This pattern holds true for attempting 12 and 15 or more credits in the first term. Of note, course attempts in this section excludes courses dropped prior to the drop deadline and all remedial courses, with the exception of math courses one level below transfer.

FIGURE 2: Number of Credits Attempted in First Term (categories not exclusive)



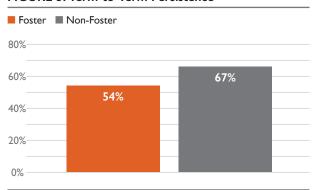
These disparities extended to credit attempts in the first year (data not shown). Foster youth and nonfoster youth had comparable proportions of students who attend full-time, at 32 percent and 36 percent, respectively. (Unlike the credit attempts shown in Figure 2, full-time status includes remedial coursework.) The percentage of students who attempt 30 units in the first year are low in the California Community College system for non-foster youth (18 percent), but even lower for foster youth (11 percent). The average number of credits attempted by non-foster youth in their first year was 19, compared to 17 credits attempted by foster youth. This, along with the findings shown in Figure 2, may be indicative of a general population of students who attend community college while balancing work and family obligations. These concerns may be more pronounced for the foster youth population.

These milestones for credits attempted did not show large differences among ethnic groups of foster youth, with Asian students only marginally outperforming other ethnic groups (data not shown). All foster youth racial or ethnic groups had relatively low completion rates.

Term-to-Term Persistence

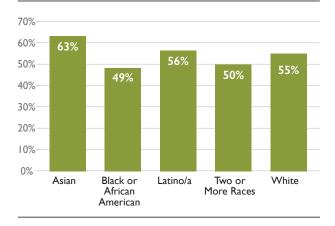
Keeping foster youth in college across several terms and years is a necessary step to achieving educational goals. Persistence between the first and second terms for foster youth was 54 percent, compared to 67 percent of non-foster youth (see Figure 3).

FIGURE 3: Term-to-Term Persistence



Among ethnic groups of foster youth, African American (49 percent), two or more races (50 percent), White (55 percent) and Latino/a (56 percent) students persisted at lower rates than Asian foster youth (63 percent) (see Figure 4).

FIGURE 4: Foster Youth Persisting from Term 1 to Term 2 by Ethnicity



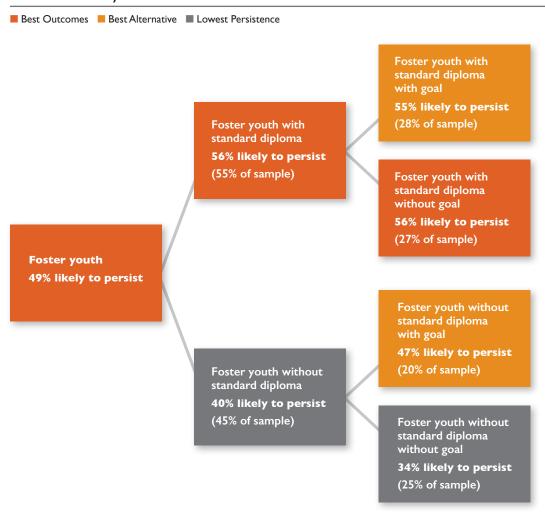
Pathways to Foster Youth Persistence

Community colleges in California lose about half their foster youth students from one term to the next. While some foster youth who leave may return, many do not. This is a missed opportunity for many foster youth who may never achieve their goal of a degree and a more stable economic future.

Using the cohort of foster youth students from 2012–2013, an algorithm was developed to understand the pathways through which foster youth may persist in community college. As shown in the decision tree in Figure 5, receiving a standard high school diploma (rather than a GED or no diploma) was the most important element in persisting from the first to the

second term. Foster youth students who received a standard high school diploma are estimated to persist at a rate 15 percent higher than students who did not get a standard diploma. Lack of this particular credential may present a barrier to services, particularly financial aid, and also speaks to student resilience or the quality of a foster youth's high school education. For foster youth without a standard diploma, declaring an academic goal of attaining a certificate, degree, or transfer upon matriculation (through CCCApply) was associated with a 13 percent increase in persistence, compared to youth that did not declare a goal. There was very little difference in persistence for foster youth with a standard diploma based on this variable.

FIGURE 5: Pathways to Persistence





Facilitating Persistence with Social Supports

Specialized programs to support foster youth spend a great deal of time and resources to keep students connected to, engaged in, and academically successful in college. Some common approaches used by bright spot colleges include ensuring uninterrupted contact with foster youth when classes are not in session. Many foster youth may not have a supportive adult or caregiver with whom to spend the summer or holiday periods. Contact with program staff, either by text or email, was identified as supportive of student emotional well-being and persistence in college.

Other supports, either provided to all students or only for foster youth, included mental health counseling, peer support groups, and life skills workshops. Statewide, only two of the 69 colleges that responded to the survey identified no targeted social or emotional support for foster youth. What set bright spot colleges apart were the wide range of approaches adopted, such as the technological solution used by Reedley College (see box). In addition, bright spot programs described a higher intensity or greater availability of these services to ensure foster youth have the emotional support and guidance to persist in post-secondary education.

Technology in Action: REEDLEY COLLEGE

Reedley College utilizes the Remind app to send text messages to foster youth students with information about workshops, deadlines, and other pertinent information. Staff at the foster youth program maintain a separate phone number through Textfree that students can use to text staff. This phone number is linked to email so that staff receive a notification and can reply through their work email when students send a message. As many college students may not check or respond to emails, this approach has been a great way to communicate with students and maintain a separation from staff members' personal cell numbers.

EARN

Credits Earned

A more important measure than the data on course attempts presented previously is the completion rate of those credits – that is, whether students successfully passed the courses. Completion here is defined as passing a course with a grade of C or above, or attaining a "pass" outcome for courses without grades. Foster youth consistently earn credits at lower rates than non-foster youth. In 2015–2016, 28 percent of foster youth earned six credits or more in the first term compared to 45 percent of non-foster youth. Only I percent of foster youth earned 15 or more credits in the first term, compared to 4 percent of non-foster youth (see Figure 6).

There were noticeable disparities in credit completion outcomes within racial groups of foster youth (see Figure 7). For example, almost 3 percent of Asian foster youth completed 15 credits in the first semester, compared to 0.3 percent of African American foster youth. These outcomes were more pronounced for completing 30 credits in the first year, with 1 percent of African Americans and 2 percent of Latino/as achieving this outcome, compared to 7 percent of Asians. White students also trail Asian students in this outcome.

Outcomes were similar when considering credits earned in the first year, which includes spring and summer terms (see Figure 8). Foster youth completed 15 or more credits at almost half the rate of non-foster youth. In addition, 30 credit completion within the first year – an important predictor of degree, certificate, or transfer attainment – was substantially lower for foster youth than non-foster youth (2 percent and 7 percent, respectively).



FIGURE 6: Number of Credits Earned in First Term (categories are not exclusive)

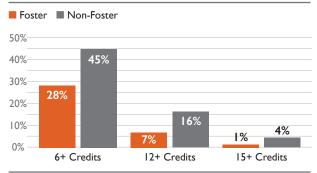


FIGURE 7: Foster Youth Earning 15+ Credits in First Term by Race

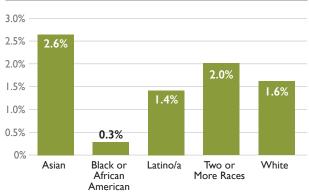
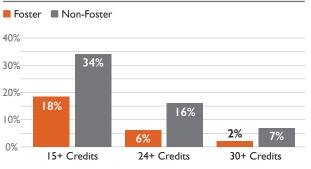


FIGURE 8: Number of Credits Earned in First Year (categories are not exclusive)



Why is 30-credit completion within the first year so important?

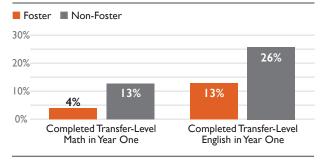
Research has demonstrated that the number of credits attempted and completed by students in the first term and first year of enrollment (15 credits in the first term and 30 credits in the first year) are strong predictors of completion of a degree, certificate or transfer in community college. This is not necessarily a causal relationship; youth who are more motivated, capable, and supported by a child welfare agency may be more likely than others to take on more credits. State and national studies have found higher rates of completion for students who attempted 15 credits instead of 12 credits in their first term. Students who reach early momentum milestones (15 credits in their first semester and 30 credits by the end of year one) are more likely to stay on track to graduate.

Although numerous studies have documented the predictive power of these early benchmarks, oftentimes foster youth are counseled to take a lighter load in their first year for fear of overwhelming the students or having them not succeed. The findings in this report, specific to foster youth, corroborate the research that emphasizes the importance of completing 30 units within the first year, as this is a milestone that sets bright spot colleges apart from others. If you will be a provided in the predictive power of these early benchmarks, often a lighter load in their first year for fear of overwhelming the students or having them not succeed. The findings in this report, specific to foster youth, corroborate the research that emphasizes the importance of completing 30 units within the first year, as this is a milestone that sets bright spot colleges apart from others.

Math and English Completion

As shown in Figure 9, foster youth complete transferlevel English in their first year at substantially lower rates than non-foster youth (13 percent versus 26 percent). In math, 4 percent of foster youth complete the transfer- level course compared to 13 percent of non-foster youth. Overall, just 3 percent of foster youth completed both transfer-level English and math in the first year, compared to 9 percent of non-foster youth. The remaining students either took a math or English course below transfer level or simply did not attempt a course in the first year. In some cases, students may have passed a remedial course one level below transfer, then completed the transfer-level course in the second semester. This measure was an important indicator of educational success in the predictive models discussed later in this section.

FIGURE 9: Students Completing Transfer-Level Math and English in Year One



Why are College-Level Math and English Important?

A primary barrier for students achieving community college educational goals, and one that is particularly acute for foster youth, is the completion of a college-level math and English course. Students who complete these "gateway" courses in their first year have a much higher likelihood of completing a certificate, degree, or transfer. Further, as many as 25 percent of students enrolled in California Community Colleges do not even attempt an English or math course in six years.

When disaggregated by race and gender, Asian foster youth have much better outcomes on completing transfer level math and English in the first year compared to other groups, particularly African American and Latino/a students (see Figure 10). Asian foster youth have rates of transfer-level course completion on par with non-foster youth, and at rates ten times higher than African American and Latino/a foster youth. This disparity warrants further investigation, given the importance of math and English course completion on future academic success.

Course Success

Of the students who attempt a college level course, the course success rates for foster youth are 62 percent, compared to 76 percent for non-foster youth (see Figure 11). Of note, only a small percentage of foster youth gain access to these courses, and generally may be the highest performing students.

There were noticeable differences in course success rates among different ethnic groups (see Figure 12). Asian (76 percent) and White foster youth (67 percent) outperform African American (58 percent), Latino/a (59 percent) and American Indian/Alaskan Native (53 percent) foster youth on this outcome.



FIGURE 10: Foster Youth Completing Both Transfer-Level Math and English in Year One

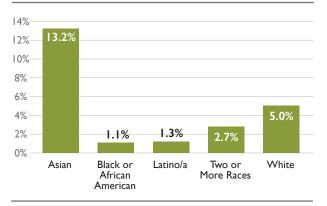


FIGURE 11: College-Level Course Success Rate

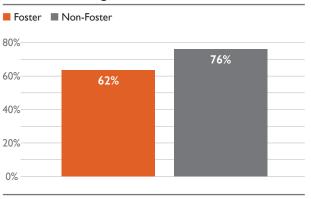
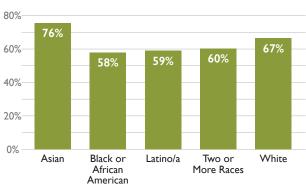


FIGURE 12: Foster Youth College-Level Course Success Rate by Ethnicity



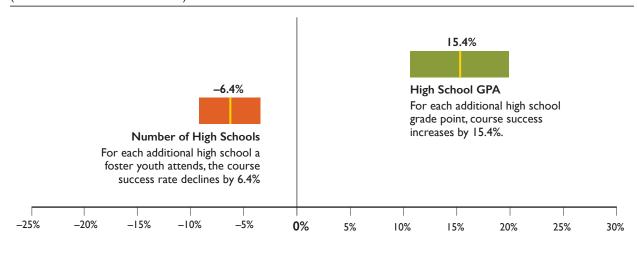
Predicting Course Success

Predictive analytics were used to understand factors that may be supportive of course completion in community college (see Figure 13). Course completion for this model was defined as any course completed with a grade of D or above.4 High school grade point average was the strongest predictor of community college course success. For every additional high school grade point a student has, the course success rate increases by 15 percent for foster youth and 18 percent for non-foster youth.5 While this confirms a relationship that was identified in previous research, the magnitude of the effect and its impact on foster youth is important to note, given that youth involved with the child welfare system often have fragmented K-12 educational experiences that may decrease student achievement. Interestingly, for each additional high school a foster youth attends, the course success rate is estimated to decrease by almost 7 percent. For non-foster youth students, that figure is 2 percent. The number of high schools attended is a key measure of the disruption of a student's academic progress.

Promising Practices to Support 30-Credit Completion

Early alert programs are emerging on campuses to keep foster youth program staff better informed about student performance. At bright spot institutions, these alerts ranged from a completely manual process solely for foster youth to fully automated systems for all students. In some colleges, instructors receive professional support on how to detect academic, behavioral or personal difficulties and send an alert to the director of the foster youth program to allow for timely intervention with the student. Evergreen Valley College requires two scheduled visits between foster youth program staff and foster youth students per month. Students are required to turn in progress reports and grade reports so counselors can monitor performance, make any necessary adjustments in the support being offered to a student, and ensure students are staying on track with their courses. On the automated side, Los Medanos College and De Anza College have purchased data systems to provide early warnings of student performance concerns. While these systems may not have been in place during 2015-2016 (the data period used to identify bright spot institutions), their acquisition indicates recognition of the need to proactively identify students at risk of adverse academic outcomes. These approaches track key data points on student progress and interventions and allow for early identification of students who appear to be off track or struggling.

FIGURE 13: Foster Youth Community College Course Completion (First-Time Foster Youth Students)



⁴This differs from the course completion measures used earlier due to data definitions in the 2012–2013 cohort used for this analysis. See Technical Appendix for additional details.

⁵Non-foster youth model results are presented in the Technical Appendix.

Institutional and Program Factors that Predict 30-Credit Completion

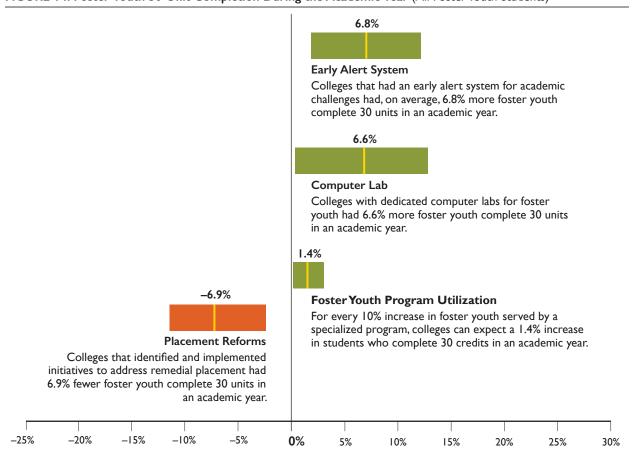
A predictive analysis was used to examine the impact of institutional and program factors on completion of 30 units within an academic year at the same school. As noted earlier, this outcome is significant because of its strong predictive relationship to achieving a degree, certificate or transfer. This analysis used the most recent year of data, 2015–2016, to reduce the lag between student outcome data and policies and programs captured in the survey. However, longer-term outcomes of degrees and other awards were not possible to capture with the cohort of students used for this analysis, as little time has passed since matriculation.

The model included type of program funding (for example, CAFYES funding, institutional support or external funding), various academic supports (early alert systems, academic counseling, and tutoring), institutional reforms to address remedial placement, facilities for foster youth (social spaces, computer labs), social support (peer mentoring), concrete supports (housing, child care), program staffing levels, and proportions of foster youth served in dedicated

programs. The proportion of foster youth served was determined by dividing the number of students receiving services from the foster youth program (as reported on the survey⁶) divided by the number of foster youth identified in the Cal-PASS Plus system.

The results of this model are illustrated in Figure 14. Colleges that had an early warning system for academic under-performance increased the likelihood of students achieving 30 units by approximately 7 percent. There was a similar positive effect (7 percent) for colleges that provided a dedicated computer lab for foster youth. Programs that served a high proportion of foster youth at the college were more likely to have students complete 30 units. For every 10 percent increase in the proportion of foster youth who were engaged by a specialized program, the likelihood of completing 30 units increased by almost 2 percent. Conversely, colleges that had undertaken reforms of remedial placement had a 7 percent decrease in students achieving this outcome.

FIGURE 14: Foster Youth 30-Unit Completion During the Academic Year (All Foster Youth Students)



⁶This analysis includes 62 colleges that reported valid utilization figures for foster youth programs.

This analysis was an initial exploratory step, given that college programs, characteristics and policies were based on a self-reported survey of less than two-thirds of all colleges. In addition, the number of colleges that reported having certain practices or supports may have been too small to identify a significant result. There are likely many other factors that support course completion that did not emerge from this initial analysis.

A further caveat to these results is that many colleges exploring multiple measures approaches to placement

were in the early stages of implementation during the 2015–2016 school year, when the student outcome data were collected. The significance of the remedial placement variable may speak to a college's awareness of the need for placement reform or the difficulty in using high school outcomes for foster youth, who have often experienced a great deal of educational instability during high school. In addition, there are many models and practices to address remedial placement, of which multiple measures is but one.

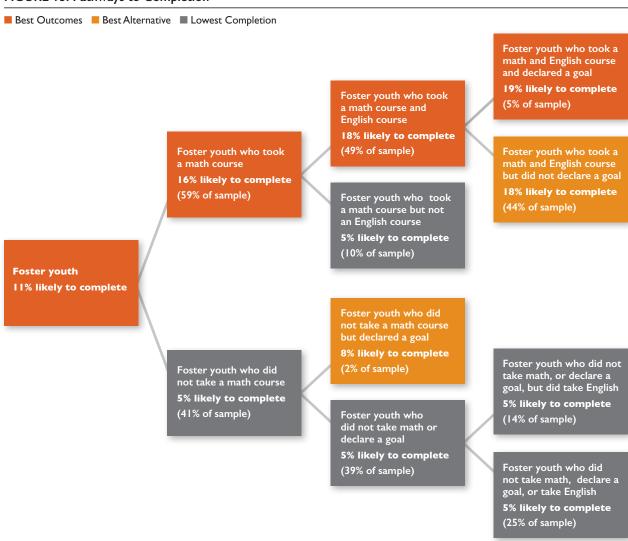


Pathways to Completion of a Degree or Transfer

Using similar methods to the earlier persistence decision tree (Figure 15), an algorithm was developed to identify successful pathways for foster youth to complete a degree or transfer to a four-year college. This analysis identified that taking a math course within the first two years of college was the most important decision point for student success. If a student takes an English course and a math course, the predicted chance of completing a degree or transfer is 18 percent. Approximately half (49 percent) of foster youth students fulfill both math and English criteria. If

a foster youth student does not take an English and math course within two years, they have a 5 percent predicted chance to complete. However, even if a foster youth does not complete a math course in the first two years, the likelihood of a student completing a degree or transfer increases from 5 percent to 8 percent if a degree or transfer goal is declared upon matriculation. Declaring a goal upon matriculation had only negligible differences for students who completed both math and English within the first two years.

FIGURE 15: Pathways to Completion⁸



⁷Math and English courses include remedial, college, and transfer-level coursework. This algorithm does not specify the order in which courses need to be taken. While taking math within the first two years was the initial sorting point, an English course could be taken prior to the math course to fit into this model.

⁸References to English and math courses in the decision tree include any course (including remedial, college, and transfer level) within these subjects, taken within the first two years.

DISCUSSION

In recent years, a great deal of research and analysis has focused on the post-secondary experiences of foster youth. From identifications in disparities between foster youth and non-foster youth in *Charting the Course* to theoretical models of promising practices in Casey Family Program's *Supporting Success*, vii initial work has emphasized the importance of bringing high-quality, actionable data to bear on the urgent issues confronting foster youth. This report is a first step in adopting a truly "data first" approach to understanding how to move from an identified need to broad-based student success for these students.

Racial Disparities in Foster Youth Outcomes

While other reports have previously identified achievement gaps between foster and non-foster youth, it is key contribution of this work is the documentation of disparities within foster youth educational experiences depending on race. As African American youth enter foster care at rates higher than their share of the population, it is reasonable to expect that these youth may make up a higher proportion of the foster youth student population. However, this report has demonstrated that higher enrollment levels for some racial minority foster youth (compared to the share of these groups in the general population) has not been associated with better outcomes in terms of persistence, credits earned, and degrees attained.

The implications of this finding are sobering: if foster youth in aggregate underperform all other disadvantaged groups,ix then the educational experience of racial minority foster youth (in particular African American students) gives cause for grave concern. Child welfare systems have devoted substantial efforts to understanding disproportionate minority contact,* but this finding highlights the importance of disaggregating outcomes for foster youth based on key demographic factors and then providing targeted supports to overcome disparities. Given what is known about disparate outcomes for Southeast Asian youth compared to East Asian students, it will also be important to further disaggregate outcomes to capture disparities among (for example) Hmong or Laotian youth. In addition, there may be similar gaps for sexual minority and gender non-conforming foster youth, although accurate data on a broad scale is difficult to capture at this stage.

Momentum Points for Foster Youth Community College Success

The predictive modeling completed for this report has highlighted the importance of connecting key momentum points across a foster youth's educational experience. Receiving a high school diploma and a stable high school experience were the strongest predictors of foster youth success and persistence in college. This area requires collaboration between educators and child welfare professionals. It is one of the key tenets of both the federal Every Student Succeeds Act and long-standing state-based efforts to improve foster youth educational outcomes.xi Persistence after the first year of college was influenced by whether a student had a standard high school diploma rather than an equivalency diploma or no diploma. This finding should be shared with high school guidance counselors and child welfare case workers to ensure that foster youth understand the importance of finishing high school. The number of high schools attended also had a significant impact, with increased school mobility leading to poorer post-secondary outcomes. Notably, the impact of school mobility was had a more negative impact on foster youth community college students than non-foster youth.

Community colleges can support foster youth by intervening in specific ways upon matriculation.

Attempting both math and English courses at any point during the first two years of college was the strongest predictor of community college award or transfer. For students who do not take a math course within the first two years, stating an educational goal of an Associate's degree or transfer upon matriculation was tied to a higher likelihood of graduating with a degree or certificate or transferring to a four-year college. This finding indicates that early outreach and academic counseling – whether provided by foster youth programming or for all students – may make a substantial difference in student outcomes.

While the importance of making connections across key segments of the education system (elementary school to middle school, middle school to high school, etc.) has been discussed often in regard to other disadvantaged students; this analysis has for the first time indicated the paramount importance of high school experiences for the success of foster youth in community college. Connecting the dots between high school and college is essential to each step of the framework (equip, enroll, earn, embark) developed in *Charting the Course*.

Institutional and Program Practices Linked to Course Completion

This report has highlighted a combination of institutional practices and specific program supports that were identified in bright spot colleges as an initial step to understand foster youth success. The exploratory quantitative modeling undertaken to connect institutional and program practices to foster youth outcomes has provided some initial guidance on the importance of these elements to student success. Programs with early alert systems, whether manual or automated, performed better on 30-unit course completion, a key predictor of later student success. Colleges that engaged a relatively high proportion of foster youth in programming experienced better outcomes on this measure. This suggests that providing targeted supports to a large percentage of foster youth pays dividends by ensuring students receive appropriate services prior to or immediately upon experiencing a crisis.

Finally, a great deal of research has linked implementation of multiple measures approaches to reduce remedial placement with improved process measures of course placement and educational outcomes.**iii However, in this analysis, colleges self-reported adoption of placement reforms tended to

have fewer foster youth students that completed 30 units within an academic year. There are several potential explanations for this anomalous finding: multiple measures implementation across many colleges was in an early phase in 2015-2016, when the student outcome data was collected. Institutions that had worse outcomes on remedial placement (particularly for foster youth) may have been eager to adopt reforms to address this issue. An alternate explanation is that, because placement reforms take into account predictive measures of student capacity based on high school experience, and foster youth are more likely to experience interruptions in high school that may reflect in their GPA and other key measures, foster youth may not be benefitting from placement reforms that are enabling non-foster youth to be placed in college-level courses.

Longer term analyses that encompass award or transfer outcomes and include more granular details of institutional and program practices will be important to determine whether these intermediate findings extend to longer-term educational success.



LIMITATIONS

This report has made substantial contributions to what is known about foster youth student success. However, there are several key limitations to keep in mind:

- Foster youth were identified in a variety of ways in this analysis, from self-report to flags tied to financial aid applications. It is possible that a substantial number of youth with experience in the foster care system exist and are not included in this analysis, as more than one third of colleges that responded to the survey felt that their counts of foster youth was an underestimate. It is also possible that some students were erroneously identified as foster youth, leading to overestimates in some cases. Finally, as foster youth are primarily identified by colleges through self-report, it is not possible to discern how many youth remained in foster care into their later teenage years compared to those who were in care at younger ages.
- The analyses in this report do not control for the length or intensity of a child's experience in foster care. Future quantitative modeling will combine educational data from Cal-PASS Plus and child welfare outcome data, particularly regarding placement stability and emancipation exits.
- This report does not evaluate the causal relationship between specific foster youth programs and student outcomes. As noted previously, a combination of institution-wide practices and program-level supports were associated with better academic outcomes for foster youth. In some cases, it appears that institutional practices and broader support structures for all vulnerable students contribute to foster youth success, independent from particular programs or interventions.
- This analysis was limited to foster youth in California, so these findings may not be generalizable to other states.

NEXT STEPS

This report has highlighted many directions for future work in understanding how foster youth access and succeed in post-secondary education, particularly at the community college level.

- Given a foster youth's high school experience is predictive of success in community college, further data matching and analysis are needed between K-12 school districts and community colleges. This has the potential of highlighting where there may be gaps in identification of foster youth and instituting early warning systems for the types of preparation or intermediate outcomes critical to success at the postsecondary level.
- Future work should also cross-reference community college and child welfare data to understand the full extent of children who have been in foster care (from a single day to many years) who enroll in postsecondary institutions, as well as any differences in educational outcomes for youth with experience with the child welfare system.
- The triangulated findings from quantitative analysis and qualitative interviews warranted highlighting of the promising practices in higher-performing programs. However, further analysis is needed to assess the efficacy of these practices as implemented and the degree to which each individual practice contributes to student success.
- It is crucial to hear directly from foster youth regarding their educational experiences and the perceived efficacy of supports provided by community colleges and foster youth programs. Student voices are not only necessary to validate the importance of practices included in this analysis, but also to identify new variables that researchers are unaware of or have not yet had an opportunity to include in data collection efforts.
- Several interview respondents identified NextUp and other specific foster youth programming as integral to efforts to grow the number of staff, expand services, and recruit more foster youth to participate in programs. This is an area worthy of further inquiry, as the CAFYES program began implementation in Spring 2016. Future analyses may find new relationships or practices that have emerged as these programs have matured.
- Although not tracked in this report, understanding outcomes for former foster youth who embark on a career – the fourth "E" – is a critical next step in understanding the connection between postsecondary education and future economic well-being.

CONCLUSION

Every child deserves the opportunity to access high-quality education that leads to a living wage job. Too often, youth who have experience in the foster care system lack the support and resources necessary to make this a reality. The bright spot colleges highlighted in this report provide a measure of hope that educational institutions can help foster youth succeed – right now, right here, and within the current resources. Much work remains, however. It will require collaborative work among government, business, private funders, and non-profit organizations to ensure foster youth achieve educational equity with their peers. Foster youth deserve nothing less than an urgent, all-hands-on-deck approach to achieving their dreams.

TECHNICAL APPENDIX

I. Population

The population of interest for this report was first time California Community College students who self-identified as foster youth at matriculation. Descriptive analyses draw on first-time foster youth students enrolled in 2015–2016, while predictive analyses use data from 2012–2013 to track student outcomes over time. One exception is the regression analysis completed to tie student outcomes to institutional and program factors, which used data from 2015–2016. Demographics of the 2015–2016 cohort are included in the body of the report (see Table 1). Characteristics of the 2012–2013 cohort are presented for reference in Table A1.

The cohort does not include high school students participating in college dual or concurrent enrollment. To be included in either cohort, a student must have been validly enrolled in at least one or more courses any time during the academic year (summer 2012 through spring 2013 or summer 2015 through spring 2015, respectively).

For analyses involving high school data, the population of foster youth students was truncated to a sample of students with four years of high school data in the Cal-PASS Plus system (course success and persistence analyses). The sample yielded 613 foster youth students and 43,862 non-foster youth students. As shown in Table A2, this sub-sample was largely reflective of the entire first-time foster youth population from 2012–2013. Only students with four years of data were included to accurately calculate high school grade point average and the number of high schools attended. The non-foster student cohort was constructed in the same fashion with the exception of the foster youth designation at matriculation.

In addition, this report includes results from the 69 community colleges that responded to the program survey and representatives from six bright spot colleges that participated in interviews.

II. Analyses

Course Success

An ordinary least squares (OLS) multiple linear regression model was used to identify which demographic and high school outcome measures have a significant effect on course success rate in community college. The model controlled for ethnicity, gender, having a degree-seeking educational goal upon matriculation, high school GPA, the number of high schools attended, the number of community colleges attended in the first year and whether the student received a standard high school diploma. White and male students were used as reference groups for binary variables.

Persistence

Persistence was defined as students who were validly enrolled in a college for two consecutive primary terms. This analysis used a decision tree classification algorithm to identify variables that predict persistence in community college. The three predictors included the model include the number of Advanced Placement courses taken in high school, high school GPA, a binary for receiving a standard high school diploma, and a binary for whether the student declared an award/ transfer educational goal upon matriculation.

Completion of Certificate, Associate Degree, or Transfer to a Four-year College

This analysis also used a decision tree classification algorithm to identify college level factors that predict completion in community college. The three covariates in the model include a binary for whether the student took a math course in their first two years, a binary for whether the student took an English course in their first two years and a binary for whether the student declared an award/transfer educational goal upon matriculation. The model predicts the likelihood of a student completing a certificate, degree, or transfer (target variable) given college-level factors upon matriculation or early in their college career. Gini impurity was used to minimize misclassification.

TABLE A1: Demographics of First-Time College Students, by Foster Youth Status (2012–2013)

| | | Foster Youth | | Non-Foster Youth | |
|--------------|-------------------------------------|--------------|-------|------------------|-------|
| | | Number | % | Number | % |
| All Students | | 3,922 | | 294,618 | |
| Gender | Female | 2,176 | 50.8% | 154,152 | 48.2% |
| | Male | 2,060 | 48.1% | 160,612 | 50.2% |
| | Unknown Gender | 50 | 1.2% | 4,971 | 1.6% |
| Race | African American | 855 | 19.9% | 21,845 | 6.8% |
| | American Indian or Alaskan Native | 32 | 0.7% | 1,085 | 0.3% |
| | Asian | 332 | 7.7% | 41,456 | 13.0% |
| | Hispanic | 1,666 | 38.9% | 127,134 | 39.8% |
| | Native Hawaiian or Pacific Islander | 14 | 0.3% | 1,473 | 0.5% |
| | Two or More Races | 231 | 5.4% | 11,220 | 3.5% |
| | Unknown Race | 291 | 6.8% | 26,937 | 8.4% |
| | White | 865 | 20.2% | 88,585 | 27.7% |

TABLE A2: Demographics of First-Time College Students with Four Years of High School Data, by Foster Youth Status (2012–2013)

| | | Foster Youth | | Non-Foster Youth | |
|--------------|-------------------------------------|--------------|-------|------------------|-------|
| | | Number | % | Number | % |
| All Students | | 613 | | 44,893 | |
| Gender | Female | 311 | 50.7% | 21,704 | 48.3% |
| | Male | 300 | 48.9% | 23,026 | 51.3% |
| | Unknown Gender | 2 | 0.3% | 163 | 0.4% |
| Race | African American | 124 | 20.2% | 3,917 | 8.7% |
| | American Indian or Alaskan Native | 7 | 1.1% | 137 | 0.3% |
| | Asian | 39 | 6.4% | 6,388 | 14.2% |
| | Hispanic | 252 | 41.1% | 19,403 | 43.2% |
| | Native Hawaiian or Pacific Islander | 0 | 0.0% | 209 | 0.5% |
| | Two or More Races | 41 | 6.7% | 1,616 | 3.6% |
| | Unknown Race | 35 | 5.7% | 2,643 | 5.9% |
| | White | 115 | 18.8% | 10,580 | 23.6% |

Both decision tree analyses explored variables that community colleges may influence. Race, gender and previous high school performance are all important indicators to consider in evaluating factors that contribute to student success. Gender and race were not significant in the course success regression after controlling for high school GPA. Additional analyses were undertaken to determine whether high school GPA is a main driver of success, rather than the factors identified in the decision tree (taking math, English or a particular type of education goal). The average high school GPAs for students who met these criteria were virtually identical to those that did not, for both foster youth and non-foster youth.

Bright Spot College Identification

Using 2015–2016 academic year data from Cal-PASS Plus, latent class analysis was used to identify bright spot colleges in the California Community College System. This statistical technique assumes that:

- A. Hidden groups (latent classes) of colleges exist among a larger set of colleges;
- B. A set of observable criteria that represents various dimensions of performance can distinguish these hidden groups from one another; and
- C. No single criterion is presumably better than another in distinguishing bright spot colleges among a larger set of colleges; the pattern of results will determine which are the more important distinguishing criteria.

Schools were classified with respect to four positive outcomes: percentage of foster youth in full-time status, percentage of foster youth that had completed 30 units in one year, course success, and award rates, as well as remedial rates in math and English. These variables were the strongest predictors of foster youth student success, particularly completion of 30 units. Amassing 30 units is highly predictive of academic success later in college and degree completion. Course success is defined as passing with a grade C or better; award rates identified foster youth that received a certificate or Associate's degree.

This analysis identified a group of 11 bright spot colleges that performed well on all four selected outcomes despite having average or above average levels of students enrolled in remedial coursework in English and math. The probability of inclusion for each of the bright spot colleges was above 90 percent.

Table A3 highlights the outcomes for the 11 bright spot schools compared to all other community colleges in the state.

The student outcome data for identification of bright spot colleges was not limited to those served by a foster youth program, but rather included all students identified as foster youth in the campus data system.

TABLE A3: Foster Youth Outcomes by Latent Class Analysis

| | Remedial Math Mean (SD) | Remedial English Mean (SD) | Full Time Status Mean (SD) | 30 Unit Completion Mean (SD) | Course Success Mean (SD) | Award Rate Mean (SD) |
|-------------------------|----------------------------|----------------------------------|----------------------------------|------------------------------------|--------------------------------|-------------------------|
| Bright Spot Colleges | 79.0% (3.2%) | 86.1% (3.2%) | 18.5% (<.01%) | 42.9% (8.4%) | 56.8% (3.2%) | 7.3% (<.01%) |
| All Other Colleges | 69.9% (10.5%) | 86.9% (7.7%) | 14.3% (5.5%) | 26.6% (8.9%) | 50.5% (8.9%) | 4.9% (3.2%) |

Bright Spot College Interviews

As described above, I I colleges were identified using a latent class analysis process. A purposeful sample of six colleges were selected for in-person interviews, representing more than half (55 percent) of all bright spot colleges. Institutions were excluded if they had fewer than 50 identified foster youth. Inclusion criteria ensured representation from colleges with large and small foster youth populations (more than 200 youth and less than 200 youth, respectively).

At each college, a structured set of protocols was used to interview both college leadership and foster youth program staff. Leadership representatives included deans, administrators in charge of student services, and/or vice presidents of instruction. Program staff included a foster youth program director, coordinator, and/or a counselor involved in supporting foster youth. Documents or materials that exemplified promising practices described in this report were collected to demonstrate the level and consistency of practice and to validate the descriptions of promising practices described in interviews.

It should be noted that, in identifying bright spot colleges, this report does not evaluate the impact of specific support programs for foster youth. Community colleges in California have implemented foster youth programs with a wide range of organizational structures, intensity, and funding. This variation makes it difficult to speak to a particular program model that may be associated with improved outcomes for foster youth. Instead, the analysis seeks to highlight promising practices that may be adopted by institutions at both the institutional and program level. The practices outlined in this report cover a range of interventions that are available both to colleges with no specific programming for foster youth, as well as those with robust existing programs, such as Guardian Scholars or NextUp.

A further caveat is that the promising practices identified in this report do not all exist in a single institution or in the most developed form in every institution identified as a bright spot. Generally, however, higher-performing institutions had many of these practices in common.

Institutional and Program Predictors of 30-Credit Completion

Multiple regression analysis modeled the impact of the institutional and program factors on foster youth success. This analysis included 62 colleges that responded to the foster youth support survey described in the body of the report that were successfully matched to 2015–2016 data on foster youth performance in Cal-PASS Plus. The outcome variable of interest was students who completed 30 units at the same school, which was selected based on its strong predictive relationship to achieving a degree, certificate or transfer.

Predictors that were included in the model encompassed funding (specifically whether the school received CAFYES or had external funding), staffing levels and proportions of foster youth served in dedicated programs, various academic supports (early alert systems, academic counseling, and tutoring), institutional reforms to address remedial placement, facilities for foster youth (social spaces, computer labs), social support (peer mentoring), and concrete supports (housing, child care). Analyses were conducted using maximum likelihood with robust standard errors to account for data missingness.

III. Results

Regression tables for selected analyses are presented below to supplement the visualizations of regression results presented in the body of the report.

TABLE A4: Foster Youth Course Success Rate

TABLE A5: Non-Foster Youth Course Success Rate

| Observations: 613 | | Adjusted R-squared = .17 | | |
|--|--------------|--------------------------|---------|--|
| Variable | Coefficients | Standard Error | P-value | |
| Intercept | .20 | .07 | <.001 | |
| Latino/a | .04 | .03 | .14 | |
| Asian | .09 | .08 | .25 | |
| African American | 06 | .04 | .11 | |
| Female | 01 | .03 | .83 | |
| Education Goal | 05 | .03 | .08 | |
| Number of Community Colleges Attended | .02 | .02 | .25 | |
| High School GPA | .15 | .02 | <.001* | |
| Number of High Schools | 06 | .01 | <.001* | |
| Standard Diploma | .04 | .03 | .12 | |

| Observations: 43,852 | | Adjusted R-squared = .17 | | |
|--|--------------|--------------------------|---------|--|
| Variable | Coefficients | Standard Error | P-value | |
| Intercept | .24 | .01 | .00* | |
| Latino/a | 00 | .00 | .69 | |
| Asian | .03 | .01 | <.001* | |
| African American | 06 | .01 | <.001* | |
| Female | .01 | .00 | <.001* | |
| Education Goal | .01 | .00 | .07 | |
| Number of Community Colleges Attended | 01 | .00 | <.001* | |
| High School GPA | .18 | .00 | <.001* | |
| Number of High Schools | 01 | .00 | <.001* | |
| Standard Diploma | .01 | .00 | <.001* | |

TABLE A6: Institutional and Program Predictors of Foster Youth Success

| Observations: 62 | Adjusted R-squared = .39 | | |
|--|--------------------------|----------------|---------|
| Variable | Coefficients | Standard Error | P-value |
| Intercept | .17 | .16 | <.001 |
| Academic Staff Counseling | .03 | .03 | .37 |
| CAFYES Funding | 01 | .04 | .83 |
| Child Care Grant | 02 | .02 | .33 |
| College-Based Housing Supports | .01 | .02 | .42 |
| Computer Lab | .07 | .03 | .04* |
| Early Warning System | .07 | .03 | .01* |
| Foster Youth Facilities | 02 | .02 | .35 |
| Foster Youth Program Staff Size | .02 | .02 | .26 |
| Foster Youth Program Utilization Ratio | .14 | .07 | .04* |
| Non-College Funding | .01 | .02 | .72 |
| Peer Mentoring | 04 | .02 | .11 |
| Placement Reform | 07 | .02 | <.001* |
| Tutoring | .03 | .02 | .10 |

^{* =} Statistically significant, p<0.05

^{* =} Statistically significant, p<0.05

^{* =} Statistically significant, p<0.05

References:

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