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## Ready, Set, Launch Baseline Academic Outcomes for Students Participating in Dual Enrollment for Equitable Completion Partnerships Compared to Their Peers, 2015 – 2020

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## READY, SET, LAUNCH

Baseline Academic Outcomes for Students  
Participating in Dual Enrollment for Equitable  
Completion Partnerships Compared to Their Peers,  
2015 – 2020

Rogéair Purnell, Darla Cooper, Kelley Karandjeff  
and Diane Rodriguez-Kiino

Dual enrollment programs are gaining steam in California as a strategy for ensuring more high school students make the transition to college and arrive prepared and on a path to completion of postsecondary credentials. While historically positioned as a way for high-achieving high school students to get a jumpstart on college, a shift is taking place in the state toward a more inclusive and equity-centered approach.

Educational leaders and equity champions are advocating for dual enrollment programs to expand their reach and offer intentional opportunities for students who may need additional support, providing them early access to credit-bearing college experiences that increase their educational and career preparation and position them for long-term economic mobility. State legislation – including the College and Career Access Pathways (CCAP) partnerships (California Assembly Bill [AB] 288, 2015; AB 30, 2019) – along with efforts like Dual Enrollment for Equitable Completion (DE4EC) are advancing this movement.

DE4EC is a multi-year collaborative initiative of the Bill & Melinda Gates

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Foundation, College Futures Foundation, and Tipping Point Community, carried out with research support from learning partner RDP Consulting. DE4EC helps California community colleges and their high school partners build dual enrollment programs that strengthen equitable access and completion outcomes for students historically underrepresented in higher education. This initiative specifically defines “equitable dual enrollment” as ensuring that African American/Black and Latina/o/x students and those experiencing economic disadvantage participate in these offerings at rates proportional to their numbers within their high schools/colleges/districts.

Launched in 2021, DE4EC supports 10 California community colleges and their high school partners.<sup>1</sup> While each collaboration represents different levels of capacity and stages of dual enrollment program implementation, DE4EC selected these partners based on a common commitment to recruit and serve student groups historically underrepresented in or excluded from dual enrollment opportunities.

RDP Consulting is conducting research to inform the DE4EC effort and contribute to an increased base of evidence on what constitutes equitable dual enrollment and how this approach impacts participants. To determine the status of programs before the initiative’s launch, RDP Consulting specifically quantified, at baseline, how the secondary and postsecondary outcomes of students who participated in dual enrollment through a DE4EC partner compared to their non-dual-enrollment peers.

## LITERATURE REVIEW

For nearly a decade, California has experienced a steady climb in dual enrollment participation. In 2015-2016, 11.3% of high school seniors completed such a course; by 2018-2019, participation rose 7 percentage points to nearly 1 in 5 (18.2%) (Policy Analysis for California Education [PACE], 2020). Initially designed for scholastically advanced students, dual enrollment programs frequently engage larger percentages of Asian, White, and economically advantaged students (Fink et al., 2017; Friedmann et al., 2020; Shivji & Wilson, 2019). In spite of the potential of dual enrollment to provide a “leg up” (Friedmann et al., 2020) or “a foot in the door” (Kurlaender et al., 2021) to college, African American/Black and Hispanic/Latina/o/x students, first-generation college goers, and those experiencing economic disadvantage often have inequitable access (PACE, 2020; Muñoz et al., 2022) to these “programs of privilege” (Fink & Jenkins, 2023; Shivji & Wilson, 2019).

In California, the 2015 passage of CCAP sought to expand dual enrollment

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<sup>1</sup> Namely, Berkeley City College, Compton College, Contra Costa College, Cuyamaca College, East Los Angeles College, Fresno City College, Gavilan College, Hartnell College, Madera Community College, and Skyline College.

opportunities “to provide critical support for underachieving students, those from groups underrepresented in postsecondary education, those who are seeking advanced studies while in high school, and those seeking a career technical education credential or certificate” (CCAP, 2015, p. 92). Positively, the legislation appears to have spurred increased dual enrollment access for racial/ethnic subgroups, with gaps narrowing over time (Rodriguez et al., 2023). Yet, while African American/Black and Hispanic/Latina/o/x student participation nearly doubled between 2015-2016 and 2018-2019, “their rates still lag their Asian peers by 10 percentage points” (PACE, 2020). Similarly, analysis of dual enrollment participation by African American/Black, Hispanic/Latina/o/x, and Native American students relative to their representation among their high school population found that more than three-fourths of the 72 California community college districts had too few of these groups represented (Muñoz et al., 2022).

Evidence suggests that dual enrollment participants do academically as well or better than their non-dual-enrollment peers on high school metrics such as grade point average (GPA, on-time high school graduation, college matriculation within one year, and college persistence, retention, course success, and degree completion) (An & Taylor, 2019; Fink et al., 2017; Rodriguez et al., 2023; Schaller et al., 2023). Given these findings, increasing dual enrollment participation to equitable levels for African American/Black, Hispanic/Latina/o/x, first-generation, and male students and those experiencing economic disadvantage could be an effective pathway to increasing secondary and postsecondary completion for these historically underrepresented groups.<sup>2</sup>

Emerging evidence shows mixed results. For example, Lee et al. (2022) found that first-generation students and students experiencing economic disadvantage who participated in dual enrollment graduate high school, enroll in college, and persist at significantly greater levels than their wealthier and non-first-generation peers. A study of CCAP’s impact also showed that African American/Black, Hispanic/Latina/o/x, and first-generation participants outperformed their non-dual enrollment peers on several college success indicators, however not when compared to students involved with other dual enrollment programs (Rodriguez et al., 2023).

In addition, studies show that dual enrollment programs have the potential to offer participants exposure to the higher education environment and expectations, the

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<sup>2</sup> For the purposes of this research, “first-generation student” is based on the California Community Colleges definition and aligns with the student reporting “if both parents or guardians have never attended college or attained an associate degree or higher.” See also the California Community Colleges Transfer-Level English and Math Completion Dashboard Statewide or College View Methodology and Definitions, <https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/transfer-level-dashboard/statewide-college-methodology>.

opportunity to succeed at the postsecondary level, and a chance to plan and prepare for their post-college futures (Mehl et al., 2020; Purnell et al. 2023; Rodriguez-Kiino, et al., 2024; Rodriguez et al., 2023). Developing these academic self-efficacy skills may be particularly beneficial for historically excluded and underrepresented students (Johnson et al., 2021; Purnell et al., 2023; Rodriguez et al., 2023; Rodriguez-Kiino et al., 2024).

This study continues to add to this body of research, further examining whether dual enrollment participation can advance equitable secondary and postsecondary outcomes for historically excluded and underrepresented students. As part of the DE4EC learning agenda, RDP Consulting is specifically quantifying the effect of dual enrollment participation through equity-minded partnerships involved in the initiative.<sup>3</sup> To establish a baseline for analyzing this impact, RDP Consulting examined common academic success metrics for dual enrollment program participants compared to their non-dual-enrollment peers in the period before its launch.

## METHODS

Our specific research question for this quantitative analysis was at baseline, how did the secondary and postsecondary outcomes of students who participated in dual enrollment compare to those of similar groups of high school and California community college students who did not? RDP Consulting conducted this analysis using data provided by Educational Results Partnership's (ERP) Cal-PASS Plus (Partnership for Achieving Student Success) data management system.<sup>4</sup> This study focused on the 10 DE4EC colleges and their partner school districts and high schools, as identified by Cal-PASS Plus.

Cal-PASS Plus provided aggregated cross-sectional data of dual enrolled and non-dual-enrolled students for the academic years 2015-2016 through 2019-2020. We examined historical and recent secondary and postsecondary participation and achievement for students who completed college coursework through dual enrollment programming. Then, we compared these outcomes to those of peers who

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<sup>3</sup> The University of Southern California's Center for Urban Education (CUE) (2020) posits in Concepts and Activities for Racial Equity Work that "equitable policies and practices must target educational institutions and systems, not the students those institutions and systems have not served well" (p. 25). This research demonstrates ways DE4EC partners are interrupting exclusionary practices and operationalizing "equity-mindedness" across all aspects of their dual enrollment work.

<sup>4</sup> Along with San Joaquin Delta College and the California Community Colleges, ERP is the data and analytics partner for Cal-PASS Plus, helping to improve student success along the education-to-workforce pipeline. Learn more at <https://www.edresults.org/programs>.

did not participate in dual enrollment. Table 1 provides details on the key variables examined.

**Table 1: Data Analysis Schema**

Area of Assessment	Definition/Variables	Comparison Groups
	Dual Enrollment	
Course Offerings	Dual enrollment courses grouped by subject area	Partnership College
Dual Enrollment	<i>DE#EC</i> partner high school students participating in dual enrollment	Dual Enrolled Students
	High School Success	
College Units	Average total number of completed units at the time of high school graduation	Dual Enrolled Students
High School Graduation Rates	High school graduation rates for students who entered ninth grade at a <i>DE#EC</i> partnership high school 2013-2014 – 2017-2018	Dual Enrolled Students and Non-Dual-Enrolled Students
High School GPA	Average high school GPA at the time of graduation	Dual Enrolled and Non-Dual-Enrolled Students
Degree/Certificate Completion	Number of students earning degrees and/or certificates at the time of high school graduation	Dual Enrolled Students
College Going	Number of students attending a public in-state postsecondary institution, an in-state private college/university, and an out-of-state college/university within one year after high school graduation	Dual Enrolled and Non-Dual-Enrolled Students
	College Success in First Year	
First-Year Course Success	Percentage of students receiving a C or higher in courses taken in their first year after high school graduation	Formerly Dual Enrolled and Non-Dual-Enrolled First-Time Freshmen at Partnership California Community College (CCC)
One-Term Retention	Percentage of students continuing their college enrollment in the term immediately following their initial term	Formerly Dual Enrolled and Non-Dual-Enrolled First-Time Freshmen who graduated from Partnership high schools
One-Year Retention	Percentage of students continuing their college enrollment one year following their initial term	Formerly Dual Enrolled and Non-Dual-Enrolled First-Time Freshmen who graduated from Partnership high schools

Further, we disaggregated information by students' first-generation status, race/ethnicity, and gender where relevant. The disaggregation explored how and whether dual enrollment contributed to improved metrics related to high school success, college enrollment, and college success.

While the time frame remains constant throughout the report, the composition

of student cohorts may vary based on the metric analyzed. For instance, when analyzing outcomes attained by high school graduation, our sample comprises both dual enrolled and non-dual-enrolled students who graduated from a DE4EC high school between 2015-2016 and 2019-2020. To assess first-year college success, we focus on entering cohorts of community college students with and without dual enrollment experience between 2015-2016 and 2019-2020.

## **FINDINGS**

Initial analyses reveal encouraging findings about the educational engagement and momentum of students who participate in equity-centered dual enrollment programming. Find below key baseline results, including key secondary, college enrollment, and college success metrics. In addition, we offer disaggregated findings for populations prioritized for the DE4EC initiative, including first-generation, African American/Black, Hispanic/Latina/o/x, and male students.

## **SECONDARY OUTCOMES**

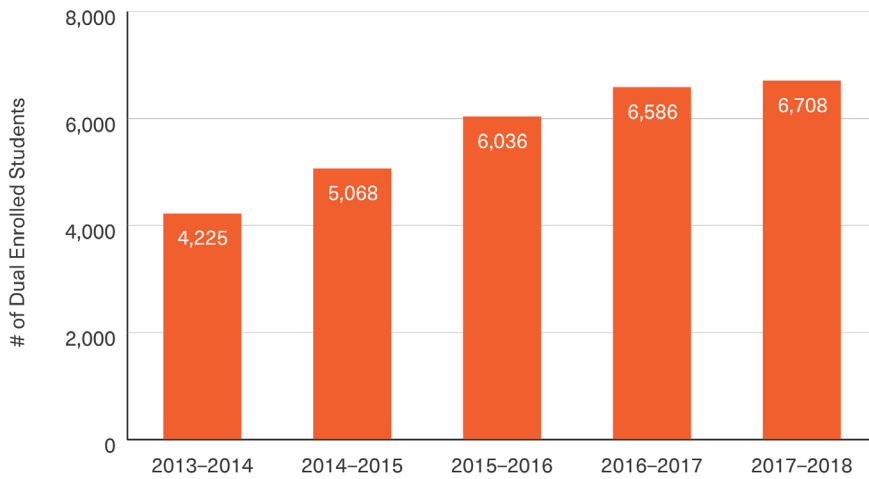
Students' high school graduation – as well as their GPA and early completion of college units and credentials before they finish – can all contribute to their success in college. We looked at these metrics for cohorts who entered the 9th grade at a DE4EC partner high school between 2013-2014 and 2017-2018. Students involved in dual enrollment consistently outperformed their peers.

Dual enrollment participation rose among students at DE4EC partner high schools between 2013 and 2021 (Figure 1). California's legislation to expand access to dual enrollment for high school students who might not be college-bound and/or who have been historically underrepresented in postsecondary education (i.e., AB 288, 2015; AB 30, 2019) likely contributed to this trend.

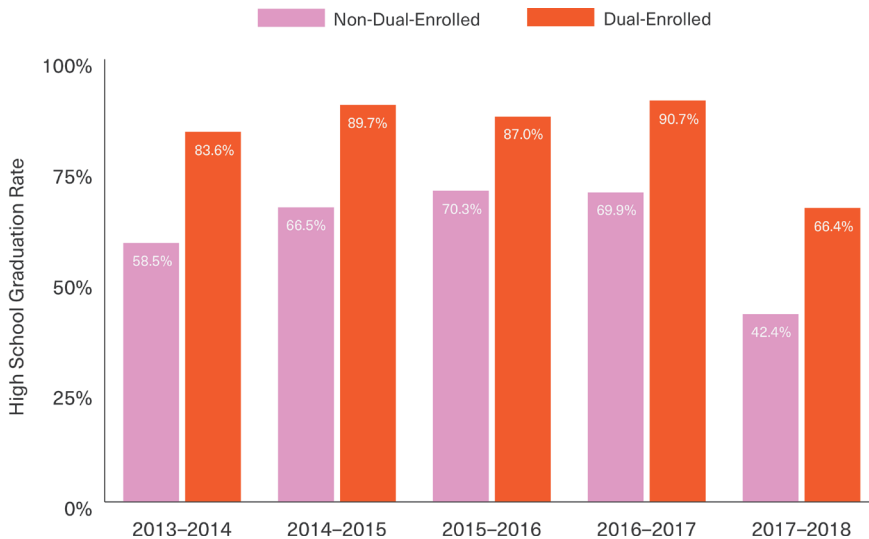
Dual enrollment participants graduated from high school at much higher rates than students who did not take part (Figure 2). Generally, dual enrolled students experienced graduation rates that are 20+ percentage points higher than their peers who did not participate. While graduation for all students in the 2017 entering cohort (who were poised to graduate in 2021) dipped – likely due to COVID-19 pandemic impacts – dual enrollment participants continued to finish high school at higher rates than their counterparts.

**Figure 1**

Number of Partner High School Students Participating in Dual Enrollment (Entering 9th Grade Cohorts, 2013 – 2017)

**Figure 2**

High School Graduation Rates by Dual Enrollment Participation (Entering 9th Grade Cohorts, 2013 – 2017)

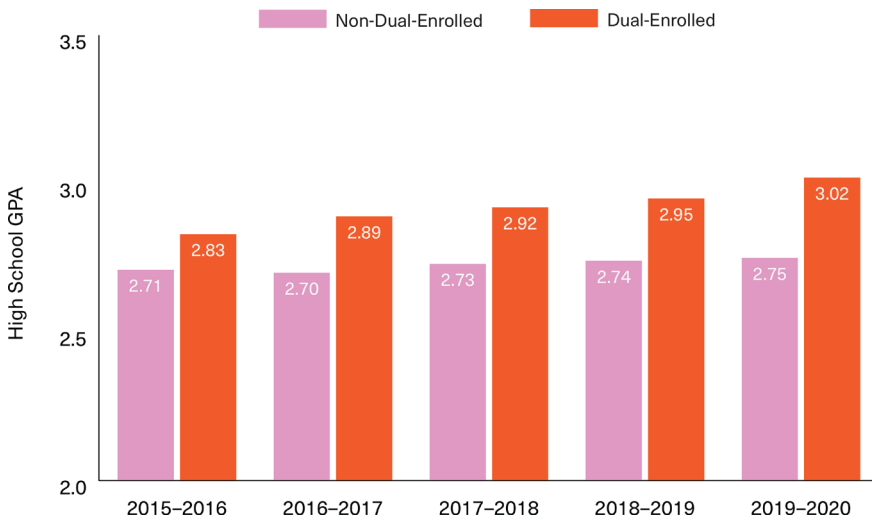




Dual enrolled students had consistently higher high school GPAs at the time of their graduation than their peers who did not participate (Figure 3). Moreover, their GPAs rose steadily over time compared to their counterparts without dual enrollment experience, whose GPAs remained flat during the same period (2015-2016 – 2019-2020). The average GPA among dual enrolled students increased by 0.19 points compared to the minimal gain of 0.04 points seen among their peers. These findings signal an area for future analysis to further understand the interaction between students’ prior academic performance and participation in DE4EC dual enrollment programs.

**Figure 3**

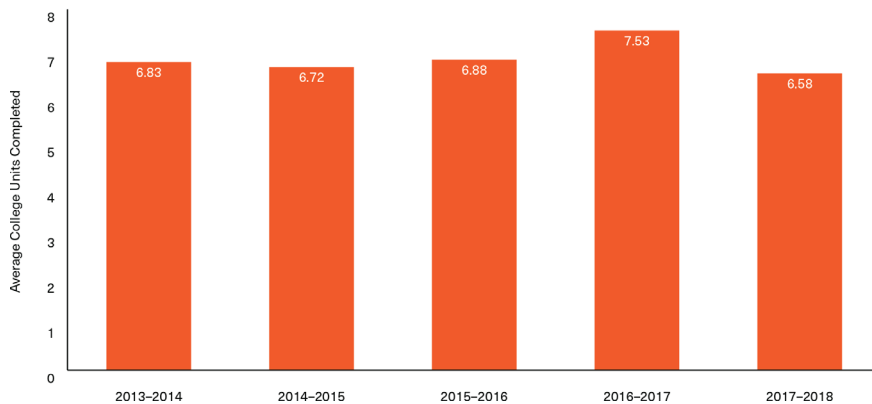
Average High School GPA upon High School Graduation by Dual Enrollment Participation (Graduating Cohorts, 2015-2016 – 2019-2020)



The average number of college units dual enrollment participants completed by high school graduation has grown in recent years (Figure 4). The 2015-2016 graduating class earned an average of 6.61 college units compared to the 7.62 units completed by those graduating in 2018-2019. The average dropped to 6.96 for the 2019-2020 graduating cohort, again likely due to COVID-19 pandemic impacts during the spring 2020 term.

### Figure 4

Average Number of College Units Earned by Dual Enrolled Students upon High School Graduation (Graduating Cohorts, 2015-2016 – 2019-2020)



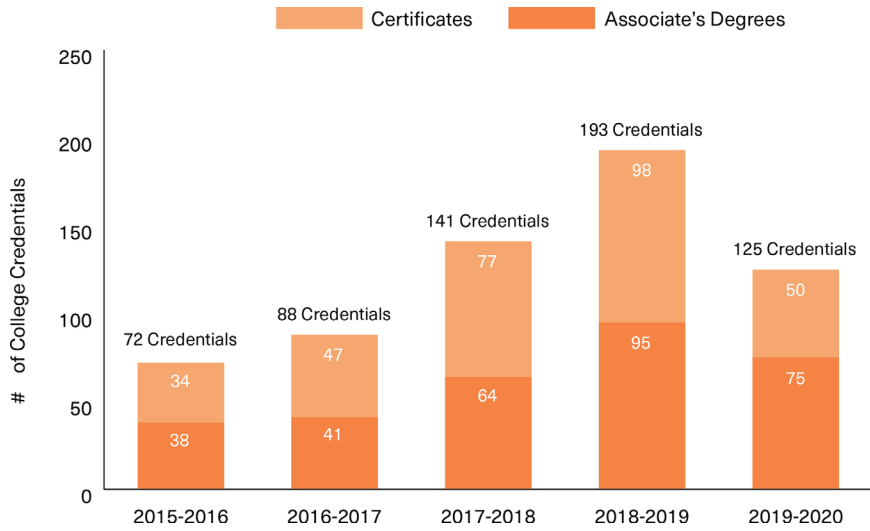
Many DE4EC partnerships have a strong foundation for accelerating postsecondary attainment among dual enrollment participants. Half of the colleges involved in DE4EC had dual enrollment participants complete associate's degrees and/or certificates by the time they graduated from high school (Figure 5, page 28). Most of the colleges that did not have dual enrolled students attaining college credentials upon high school graduation were newer to this programming during the period studied. However, these baseline results related to students' achievement of credentials indicate their partnerships hold promise for increasing these outcomes.

### COLLEGE ENROLLMENT AND SUCCESS

While overall college enrollment trended downward, the number of dual enrollment participants who matriculated to higher education within one year of high school graduation rose between 2015–2020 (Figure 6, page 28). Although college-going decreased for all recent high school graduates in 2020 (most likely due to the COVID-19 pandemic), the decline among those with dual enrollment experience was nominal compared to the sharp drop among their peers who did not participate.

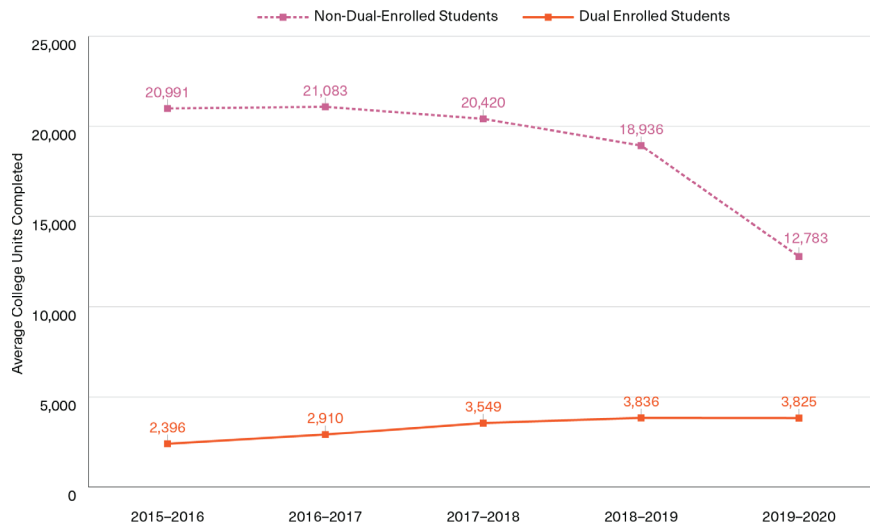
**Figure 5**

Dual Enrolled Student Completion of College Credentials upon High School Graduation (Graduating Cohorts, 2015-2016 – 2019-2020)



**Figure 6**

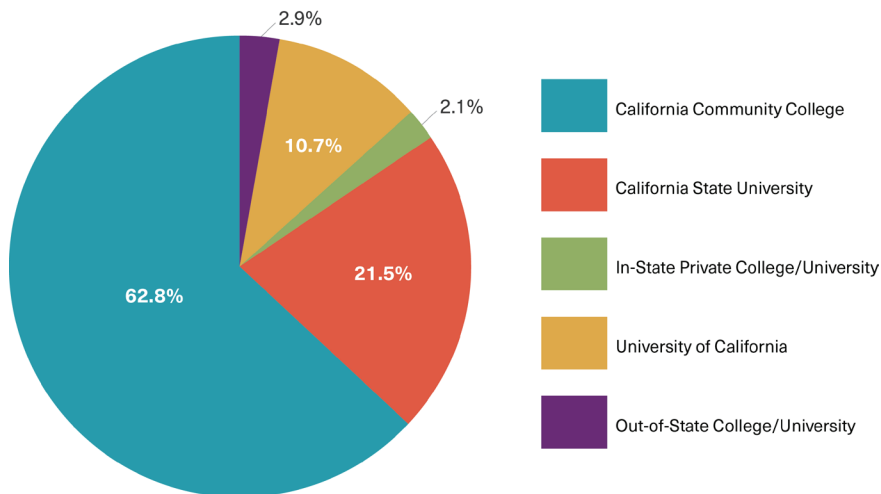
Postsecondary Enrollment at DE4EC Institutions within One Year of High School Graduation by Prior Dual Enrollment Participation (Graduating Cohorts, 2015-2016 – 2019-2020)



California's community colleges were the top destination for high school graduates with prior dual enrollment experience through a DE4EC partner institution (Figure 7). In the five years combined leading up to DE4EC's launch, most dual enrolled students matriculated to the California Community Colleges ([CCC], 63%), followed by the California State University (CSU) system (22%) and the University of California ([UC], 11%).

**Figure 7**

Postsecondary Destination among Formerly Dual Enrolled Students within One Year of High School Graduation (Graduating Cohorts, 2015-2016 – 2019-2020 Combined)

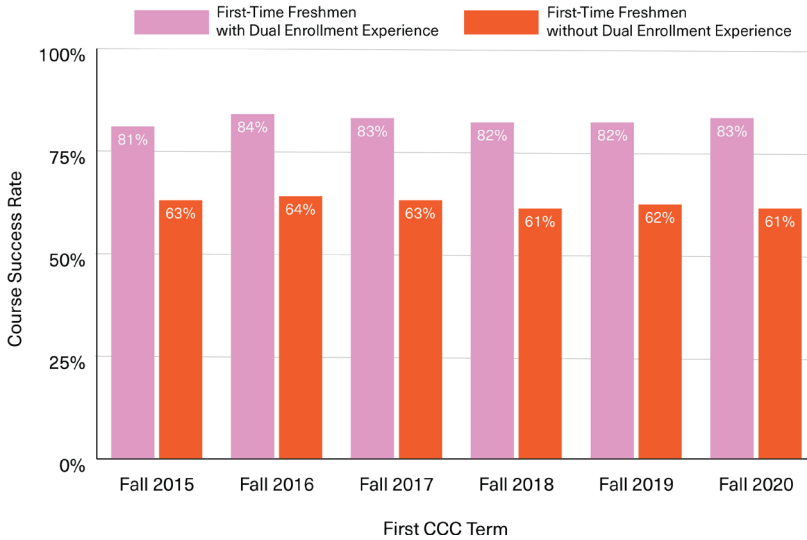


Students who previously participated in dual enrollment had significantly higher rates of course success in their first term (Figure 8). We compared the success rates of students with and without prior dual enrollment experience in the first fall term after graduating from high school at partnership community colleges and discovered that former dual enrollment participants consistently outperformed their counterparts by about 20 percentage points.

Students who experienced dual enrollment also had higher rates of retention in their first year of college. Here, we compared students with and without dual enrollment experience from partnership high schools, regardless of what community college they attended after high school graduation. All students included in this specific analysis matriculated to a CCC after high school.

**Figure 8**

First Semester Course Success Rates at DE4EC Institutions by Prior Dual Enrollment Participation (Fall 2015 – Fall 2020)



Regarding one-term retention, students who graduated high school in spring 2016 with dual enrollment experience achieved retention rates comparable to other first-time freshmen. However, a gap developed between 2017-2018 and 2019-2020. Formerly dual enrolled students had increasingly higher rates than their peers who had not participated (Figure 9, page 31). One-year retention followed a similar trajectory.

Notably, the COVID-19 pandemic appears to have had a greater impact on persistence for students who did not participate in dual enrollment. One-term and one-year retention rates dropped for students who graduated high school in spring 2019 and matriculated in the next year. For example, while one-term retention remained steady at 81% for those with prior dual enrollment experience, it declined to 73% for other first-time freshmen during that period. These findings suggest that having dual enrollment experience may have helped students stay on course with their higher education goals in the face of unprecedented disruptions resulting from the pandemic.

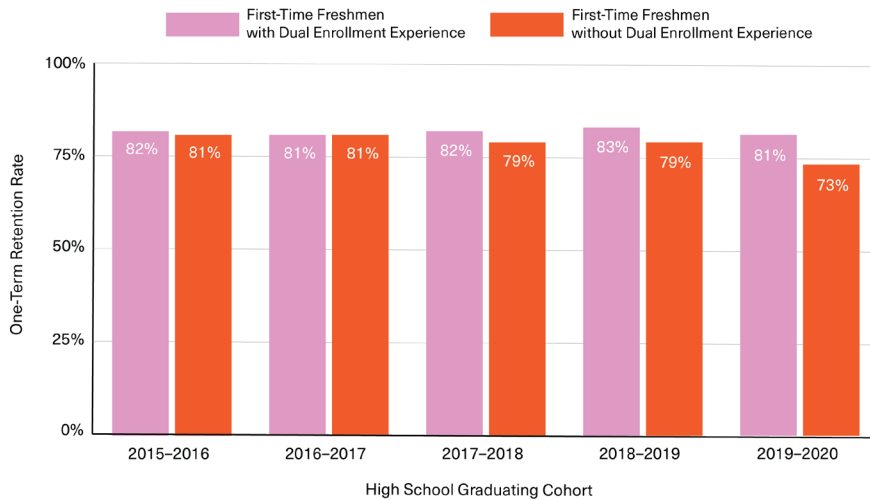
**UNDERREPRESENTED PARTICIPANTS’ OUTCOMES**

We specifically examined these metrics for high-priority DE4EC participants,

including first-generation, African American/Black, Hispanic/Latina/o/x, and male students. These analyses offered an opportunity to understand if DE4EC partnerships were primed to deliver equitable dual enrollment experiences coming into the initiative.

### Figure 9

One-Term Retention Rates in California Community Colleges by Prior Dual Enrollment Participation (Graduating Cohorts, 2015-2016 – 2019-2020)



Find below notable findings by student group, including participation in dual enrollment; GPA and college unit and credential attainment upon high school graduation; rates of matriculation to public postsecondary institutions, including the CCC, CSU, and UC systems; and trends in initial course success and retention.

#### *First-Generation Student Highlights*

Dual enrollment involvement and impact appeared to be on a positive trajectory for first-generation students in the period before DE4EC's launch. Dual enrollment participation among first-generation students rose by 56% in the years leading up to the initiative. While the increase among non-first-generation students was slightly higher (60%), the difference is nominal. This trend holds promise for improved college access among students who are the first in their families to attend higher education.

First-generation students involved in dual enrollment had higher high school

GPA than their peers who did not participate. While they earned fewer college credits by high school graduation than their non-first-generation counterparts who also participated in dual enrollment, they completed more college credentials through these opportunities than their non-first-generation peers.

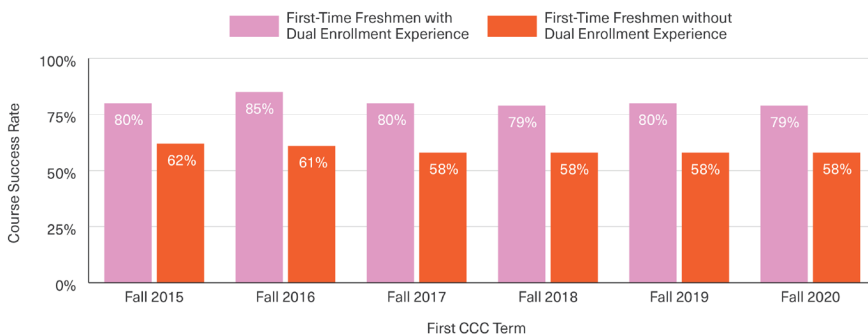
After high school, most first-generation students who previously participated in dual enrollment matriculated to a CCC (65%), followed by a CSU (22%) or UC (9%). As a result, among those with dual enrollment experience, first-generation students were more likely to attend a CCC and less likely to attend a CSU or UC than their non-first-generation peers.

Once enrolled at a DE4EC partner community college, first-generation students with dual enrollment experience had consistently higher course success in their initial semester compared to their first-generation peers who did not participate (Figure 10a). Notably, this difference is consistently about 20 percentage points each year.

First-generation students who previously participated in dual enrollment also had higher rates of one-term and one-year retention compared to first-generation, first-time freshmen who did not (Figure 10b, page 33). While the overall proportion of first-generation students in the 2019 graduating cohort who returned in fall 2020 (one-year retention) dropped significantly, likely due to the COVID-19 pandemic, this decrease was smaller among first-generation students who had participated in dual enrollment. This finding suggests that this experience may have prepared them to weather the impacts of this unprecedented disruption.

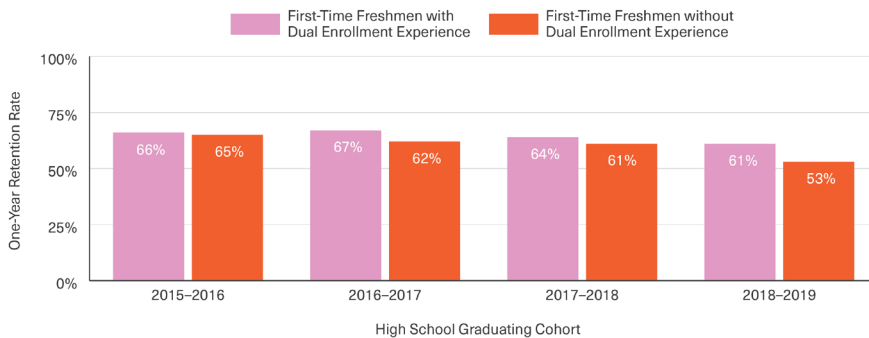
**Figure 10a**

First Semester Course Success Rates for First-Generation Students by Prior Dual Enrollment Participation (Fall 2015 – Fall 2020)



**Figure 10b**

One-Year Retention Rates by Prior Dual Enrollment Participation and First-Generation Status (Graduating Cohorts, 2015-2016 – 2018-2019)



### *African American/Black Student Highlights*

Baseline findings for African American/Black students participating in dual enrollment through a DE4EC partner appeared more variable, signaling opportunities for improved recruitment and support through these experiences. Dual enrollment participation among African American/Black students peaked for the 2015-2016 9th grade cohort at 311 students and then dropped among the groups entering in 2016-2017 and 2017-2018 (to 272 and 236, respectively) – a troubling trend. African American/Black graduates from DE4EC partner high schools were less likely to have participated in dual enrollment compared to other racial/ethnic groups.

Moreover, most African American/Black high school graduates with dual enrollment experience attended a CCC (61%), followed by a CSU (20%) or UC (8%). Interestingly, among those who previously participated in dual enrollment, African American/Black students were more likely to attend an out-of-state college (9%) than their non-African American/Black peers.

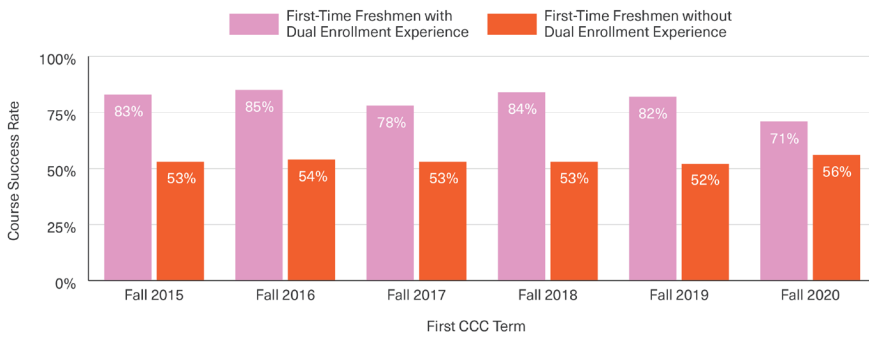
After matriculating to a DE4EC partner college, African American/Black who previously participated in dual enrollment had significantly higher first-term course success than their counterparts (Figure 11a). While these rates were consistently 30 percentage points higher for multiple years, they declined for the 2019-2020



graduating cohort who entered in fall 2020; simultaneously, course success among their peers without dual enrollment experience increased. It is important to note that the number of African American/Black students who participated in dual enrollment during this time dropped significantly, likely a result of COVID-19 pandemic impacts.

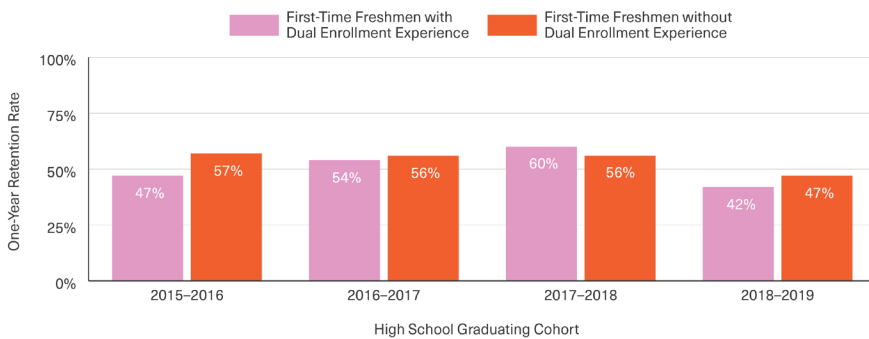
**Figure 11a**

First Semester Course Success Rates by Prior Dual Enrollment Participation for African American/Black Students (Fall 2015 – Fall 2020)



**Figure 11b**

One-Year Retention Rates by Prior Dual Enrollment Participation for African American/Black Students (Graduating Cohorts, 2015-2016 – 2018-2019)



Similarly, one-year retention among African American/Black students with prior dual enrollment experience trended upward between 2015-2016 and 2017-2018, surpassing that of their peers who did not participate (Figure 11b, page 34). However, this rate dropped significantly to 5 percentage points below their peers without dual enrollment experience at the onset of the COVID-19 pandemic. It will be important to monitor these metrics among African American/Black students in subsequent years to determine whether these findings were an anomaly or the beginning of a shifting trend.

### *Hispanic/Latina/o/x Student Highlights*

These baseline findings indicate that dual enrollment participation was proving positive for Hispanic/Latina/o/x students in the period leading up to DE4EC's start. Hispanic/Latina/o/x student involvement in dual enrollment increased by 40% between 2013 and 2020, steadily rising between 2013-2014 and 2016-2017 and dropping slightly for the 2017-2018 9th grade cohort, most likely due to the COVID-19 pandemic.

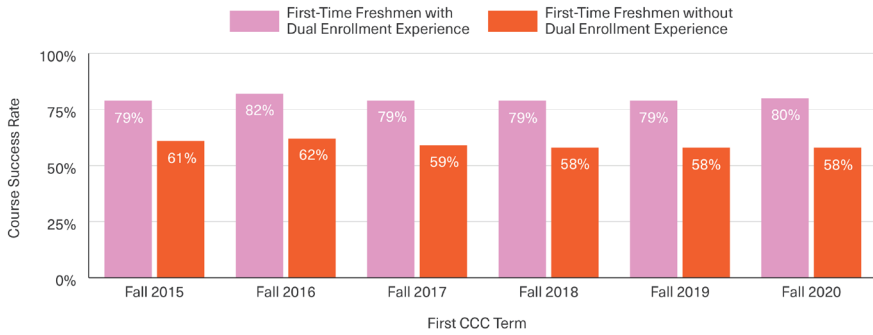
While dual enrolled students overall achieved higher high school GPAs than their peers who did not participate, Hispanic/Latina/o/x students posted the largest gain in their GPA among all racial/ethnic groups (0.26 points) over that period. Interestingly, despite earning fewer college units compared to other racial/ethnic groups, Hispanic/Latina/o/x students also earned the most college credentials by high school graduation.

Most Hispanic/Latina/o/x students with dual enrollment experience matriculated to a CCC (66%), followed by a CSU (22%) or UC (9%). Hispanic/Latina/o/x students who previously participated in dual enrollment had consistently higher course success rates in their first term at a DE4EC partner community college than other first-time Hispanic/Latina/o/x freshmen (Figure 12a, page 36). This difference is consistently about 20 percentage points each year.

Before 2020, one-term retention rates for formerly dual enrolled students did not vary much from other Hispanic/Latina/o/x students without this experience. However, these rates jumped during the COVID-19 pandemic, exceeding their peers by 7 percentage points. Similarly, for multiple years, the one-year retention rate was just slightly higher for Hispanic/Latina/o/x students with dual enrollment experience compared to their peers without. However, a more significant gap emerged for the 2018-2019 graduating cohort returning in fall 2020. This finding indicates that having dual enrollment experience may have prepared Hispanic/Latina/o/x students to persist despite the impacts of the COVID-19 pandemic (Figure 12b, page 36).

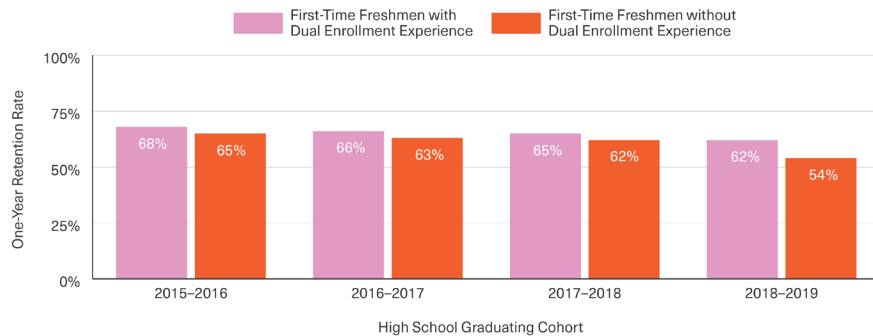
**Figure 12a**

First Semester Course Success Rates by Prior Dual Enrollment Participation for Hispanic/Latina/o/x Students (Fall 2015 – Fall 2020)



**Figure 12b**

One-Year Retention Rates by Prior Dual Enrollment Participation for Hispanic/Latina/o/x Students (Graduating Cohorts, 2015-2016 – 2018-2019)



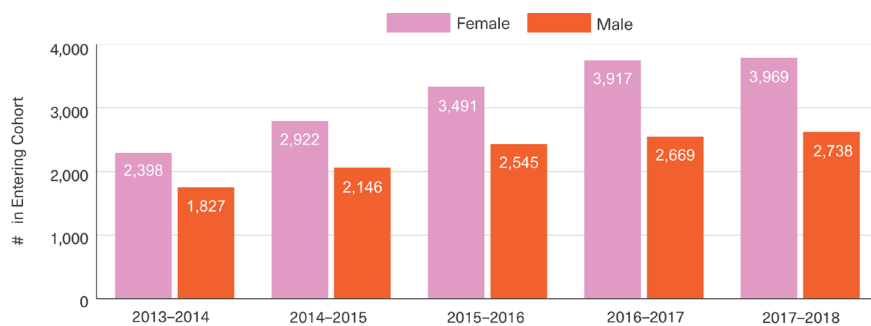
### Male Student Highlights

Both in California and across the country, male student participation (Fink, 2024) and outcomes in higher education lag behind their female-identifying peers (Rodriguez et al., 2023). Dual enrollment has the potential to help close these gaps. While male students were less likely to participate in dual enrollment prior to DE4EC's launch, female student participation increased by 1,571 between the 2013-2014 and 2017-2018 cohorts, representing a 66% jump in involvement. During the same period, male students' engagement with dual enrollment grew by 50% (911 students) (Figure 13a).

The average number of college units dual enrolled male students earned by high school graduation fluctuated over time; however, female students completed comparatively more college units on average than their male peers (apart from the 2016-2017 cohort). Further, for the 2019-2020 graduating cohort, the average units by male students declined significantly in these early days of the COVID-19 pandemic from 7.29 to 5.87, compared to 7.71 to 7.05 for female students.

**Figure 13a**

Number of Partner High School Students Participating in Dual Enrollment for Males  
(Entering 9th Grade Cohorts, 2013-2014 – 2017-2018)

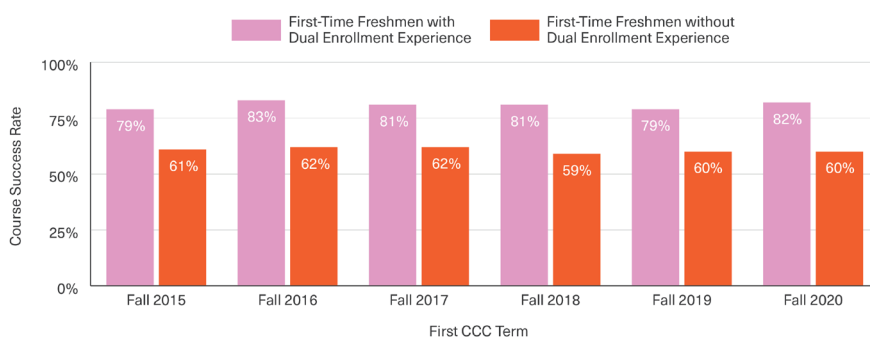


When matriculating to higher education, most males with dual enrollment experience enrolled in the CCC compared to their female peers, who were more likely to attend a CSU or UC. Positively, when attending a DE4EC partner community college, male students had higher first-term course success (Figure 13b, page 38),

and this difference was consistently 20 percentage points higher. Additionally, male students with prior dual enrollment experience had one-year retention rates higher than first-time male freshmen who did not previously participate.

### Figure 13b

First Semester Course Success Rates by Prior Dual Enrollment Participation for Males (Fall 2015 – Fall 2020)



## LIMITATIONS

The Cal-PASS Plus data are the most comprehensive intersegmental data source in California. However, not all the high schools in the DE4EC partnerships are members of Cal-PASS Plus. Therefore, information for these schools was not included in this round of research. In addition, our access to data was limited to aggregate data. Since we did not have unitary data, we were not able to use statistical controls to adjust for selection bias. Students who choose to participate in dual enrollment may be different from their peers on a variety of characteristics. For example, while we can say that formerly dual enrolled students on average have higher course success rates than their non-dual-enrolled counterparts, we cannot necessarily say this difference was a direct result of their participation in a dual enrollment program.

## CONCLUSION

The positive results for dual enrolled students in the period leading up to DE4EC's

launch – particularly for participating first-generation, African American/Black, and Hispanic/Latina/o/x students – suggest these 10 dual enrollment partnerships have a strong foundation for fostering equitable access and completion outcomes for students underrepresented in higher education. These findings underscore those students involved in dual enrollment offered by K–12, and community college partnerships committed to equity-minded programming may be positioned for greater high school and postsecondary success. Students who completed college coursework offered as part of these dual enrollment partnerships consistently outperformed their peers on measures such as high school GPA and graduation, college-going, and success and retention in the first year of college. For these students, dual enrollment was associated with higher success among indicators that all positively correlate with credential and degree completion, transfer, and workplace success.

In addition, over the five years examined in this report, the number of students participating in dual enrollment at the partnership colleges grew steadily until 2020, when the COVID-19 pandemic began. Notably, as the number and diversity of dual enrolled students grew, these students’ achievement of academic outcomes either held steady or increased. In some cases, the gap between dual enrolled and non-dual-enrolled students’ performance has even grown.

While these results are overwhelmingly positive, there is still room to improve, specifically:

- Increasing outreach, recruitment, and engagement of first-generation, African American/Black, and male students in dual enrollment programming
- Ensuring first-generation, Hispanic/Latina/o/x, and male students maximize the number of college units they complete through dual enrollment by the time they graduate from high school to advance their college progress
- Strengthening supports for African American/Black students with dual enrollment experience once they enroll in college to facilitate their postsecondary success

These data surface additional areas for examination moving forward. Specifically, these results signal potential intersectionality worth investigating, such as how first-generation Hispanic/Latina/o/x participants or African American/Black males experience and benefit from dual enrollment.

Based on the positive results from this initial analysis, we anticipate continued growth within the partnership colleges in the number of underrepresented students

with access to college courses in high school who maintain higher GPAs, graduate high school, and enter, persist, and complete college/university. We also hope that these results will inspire other dual enrollment partnerships to examine their own results to determine and document whether their programs are producing equitable access and success for students from groups that have been historically excluded from higher education.

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