JUMPSTART:

Setting Goals to Drive Equitable Dual Enrollment Participation in California's Community Colleges

20 YEARS OF FIERCE ADVOCACY

The Education Trust—West

This report does not include a focus on Asian American and Pacific Islander (AAPI) students as existing dual enrollment data does not reflect disparities for this group in the same ways that they do Black, Latinx and Native American students.

It is important to note that AAPI student data is not disaggregated and this lack of detailed information may mask existing disparities among specific Asian Nationalities.

Introduction

The COVID-19 pandemic has been painful, and its long-term negative impacts on equitable educational outcomes will unfurl for years to come. However, in spite of the disruption of the pandemic, education leaders have an opportunity to re-imagine and rebuild systems to be equity-centered in ways they've never been before. Dual enrollment holds this possibility for transformation.

Dual enrollment, which allows high school students to take college courses for credit, has the potential to be a powerful lever for the success of California's high school and postsecondary students. Early exposure to college courses sets students on a trajectory to both attend and be successful in college. However, this opportunity is not widely available for all high school students, especially Black, Latinx, and Native American students.[1] Participation rates for Black and Latinx students are significantly lower than that of their white and Asian peers.[2] If students of color don't have equal access to dual enrollment opportunities, they cannot reap the wide-ranging and critical benefits that will move California closer toward its promise of educational equity and racial justice.

This report analyzes data on dual enrollment at California's community colleges to determine the extent to which they are effectively serving students of color through equitable participation in dual enrollment. We found that K-12 local education agencies (LEAs)[3] and community college districts are not doing enough to ensure Black, Native,

and Latinx students are participating in dual enrollment at equitable levels. However, we also found that there are community college districts with equitable dual enrollment participation and many districts are not far from reaching fair participation.

This report provides a set of recommendations to address disparities in dual enrollment participation and offers suggestions on opportunities for its equitable expansion. We hope local education leaders will use this information to set goals and prioritize dual enrollment opportunities, centering those students who are the least likely to have access to college.

Recommendations for increasing dual enrollment access and participation for Black, Latinx, and Native American students

K-12 and higher education leaders should:

Establish dual enrollment goals and engage in data collection and evaluation efforts to inform planning.

Strengthen and engage in new partnerships between colleges and school districts and direct resources to ensure equitable program expansion.

Engage in focused recruitment strategies to drive participation of underserved student groups who are underrepresented in dual enrollment.

California's Dual Enrollment Landscape

What is dual enrollment and what are its benefits?

Dual enrollment describes programs that allow high school students to enroll in college courses and simultaneously earn high school and college credit. These programs are often a result of partnerships between a school or school district and a postsecondary institution. Depending on the program, dual enrollment courses can be offered at high schools, college campuses, or online.

California's dual enrollment courses allow students to make progress towards their college graduation requirements: the courses often provide transfer-level college credits,[4] which in turn decreases a student's time to degree completion and saves on tuition costs. Dual enrollment also improves high school completion rates, increases college enrollment rates, and ultimately boosts college degree attainment.[5]

Dual Enrollment in California

In 2015 then California Governor Jerry Brown signed Assembly Bill 288, which established College and Career Access Pathways (CCAP) to encourage LEAs and community college district partnerships to "offer or expand dual enrollment opportunities for students who may not already be college bound or who are underrepresented in higher education."[6] Prior to this bill, most dual enrollment students signed up for college courses on their own,[7] without formal agreements between their high school and the community college, or through partnerships based on memorandums of understanding

(MOUs) between high schools and local community colleges.[8] CCAP was intended to expand access to dual enrollment, providing a clear structure and channeling state funding towards dual enrollment partnerships.[9] Recent data reveal that racial equity gaps in student participation within CCAP partnerships are narrowing over time,[10] signaling the state's investment in dual enrollment is having the intended impact.

What are the differences between College and Career Access Pathways (CCAP) partnerships and Memorandums of Understanding (MOU)?

CCAP is a structured dual enrollment partnership[11] between the governing boards of community college districts and LEAs that result in dual enrollment opportunities for students at high school sites. CCAP aims to facilitate partnerships with the "goal of developing seamless pathways from high school to community college for career technical education (CTE) or general education transfer, improving high school graduation rates, or helping high school students achieve college and career readiness".[12] Additionally, these partnerships allow colleges to offer courses to high school students on their campuses during the regular school day while still receiving state apportionment dollars.[13] They also enable students to take a greater number of college units per term and require that tuition, fees, and textbooks are provided free of charge for the participating students.[14]

Memoranda of Understanding (MOUs) are non-structured agreements between community college districts (or a specific community college campus) and their local school districts or individual schools. These agreements are not held to the same requirements as CCAP partnerships,[15] and they remove restrictions on the types of courses that can be offered.[16] Further, MOUs have reduced reporting requirements, which can be helpful for schools that lack the administrative capacity to complete them.[17] Establishing an MOU-backed partnership can offer certain accommodations in meeting the needs of colleges and high school sites and campuses (and more broadly, the communities), but they lack the benefits noted above.
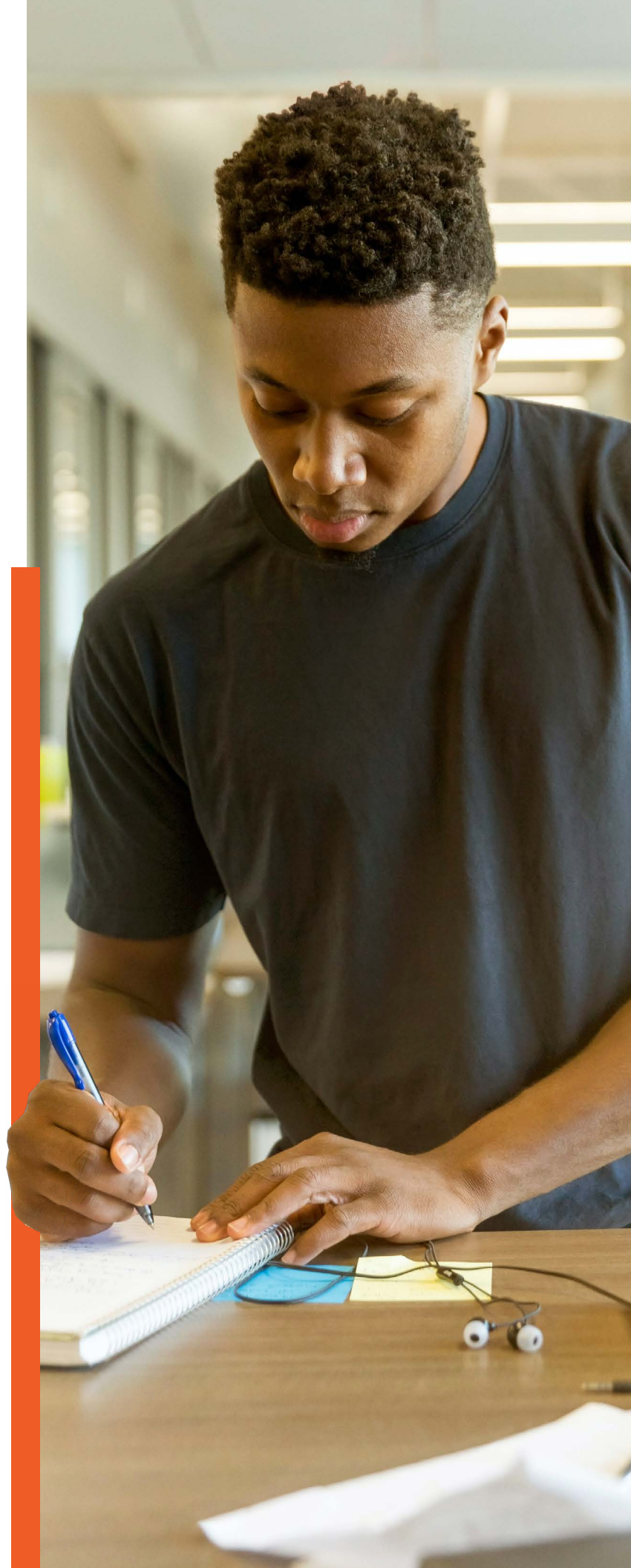
Are Latinx, Black, and Native American Students Equitably Participating in Dual Enrollment?
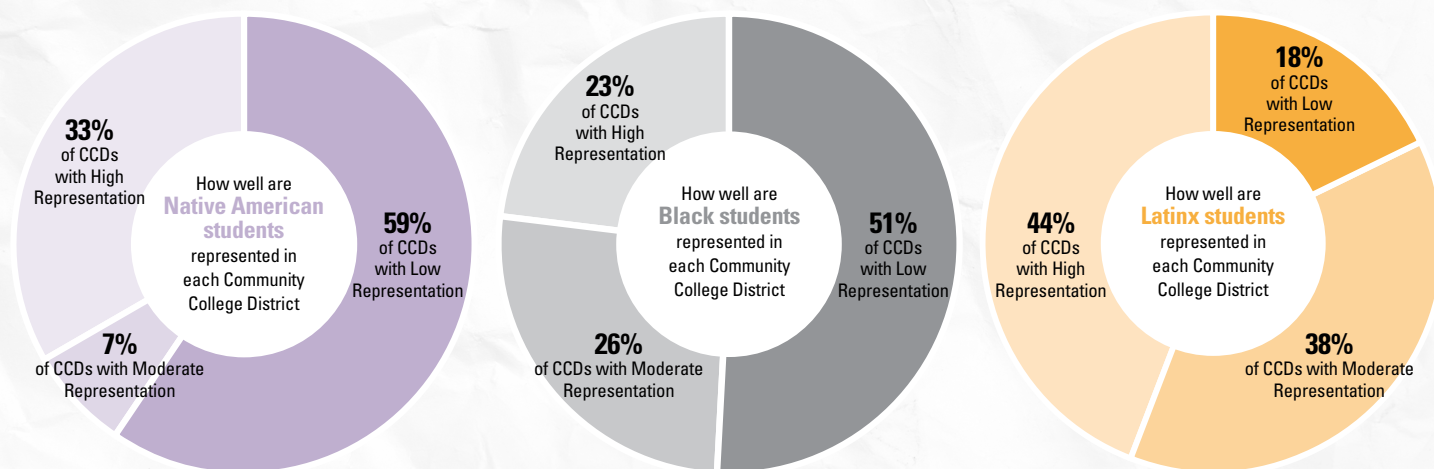
Our analysis set out to determine the degree to which community colleges are equitably serving students of color through dual enrollment participation. To do so, we categorized community college districts (CCD) based on their representation of Latinx, Black, and Native American students in dual enrollment courses relative to the population of high school students in those groups within each CCD's boundaries. We created equity ratings with three tiers – High Representation, Moderate Representation, and Low Representation. (See Appendix for methodology details.)

We identified three key findings from our analysis that underscore the need, and the opportunities that those needs present, for LEAs and community colleges to improve at making dual enrollment opportunities accessible to Latinx, Black, and Native American students.

Finding 1: Black, Latinx, and Native American students are too often locked out of dual enrollment.

Our analysis points to a simple truth: far too many community college districts in California aren't enrolling enough Black, Latinx, and Native American students in dual enrollment courses. In fact, more than three in four of California's 72[18] community college districts received at least one Low Representation rating because too few of the Black, Latinx, or Native American students in their region are represented in dual enrollment courses. While representation is limited for all students of color in our research, our analysis reveals that it is even worse for Black and Native American students who, by no fault of their own, live in regions where they tend to be excluded from dual enrollment opportunities by the CCD (see Figures 1-3 below). Finally, although CCDs across our state do a better job serving Latinx students in dual enrollment, their access remains inequitable: case in point, we rated just 44 percent of the CCDs as High Representation, showing that many districts still urgently need to increase Latinx student participation in dual enrollment.

Figures 1-3: Percentage of districts with low, moderate, and high levels of representation in dual enrollment courses, by student race and ethnicity

33% of CCDs with High Representation

How well are **Native American students** represented in each Community College District

59% of CCDs with Low Representation

7% of CCDs with Moderate Representation

23% of CCDs with High Representation

How well are **Black students** represented in each Community College District

51% of CCDs with Low Representation

26% of CCDs with Moderate Representation

18% of CCDs with Low Representation

How well are **Latinx students** represented in each Community College District

44% of CCDs with High Representation

38% of CCDs with Moderate Representation

Source: The Education Trust—West analysis of fall 2019 data. Note: Figures may not sum to 100 due to rounding.

Finding 2: Districts can do better for Black, Latinx, and Native American students by making small adjustments.

Despite the dual enrollment participation barriers facing Black, Latinx, and Native American students, community college districts can implement targeted policy and practice changes to continuously improve equity in their districts. This may not require making significant shifts: some districts need to enroll just a few additional Latinx, Black, or Native American students to achieve full representation in their region and increase their equity ratings (see below). Greater representation in dual enrollment is an important first step, however given how underserved these students are, CCDs should also use overrepresentation of students of color in dual enrollment as a strategy for equity.

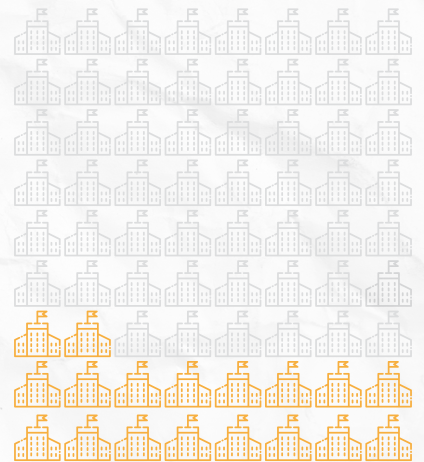### Out of 72 community college districts (CCDs) in California...

48
would only need to enroll another
1-25 Native American students
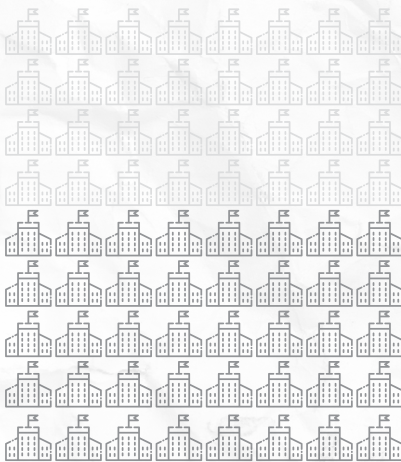
40
would only need to enroll
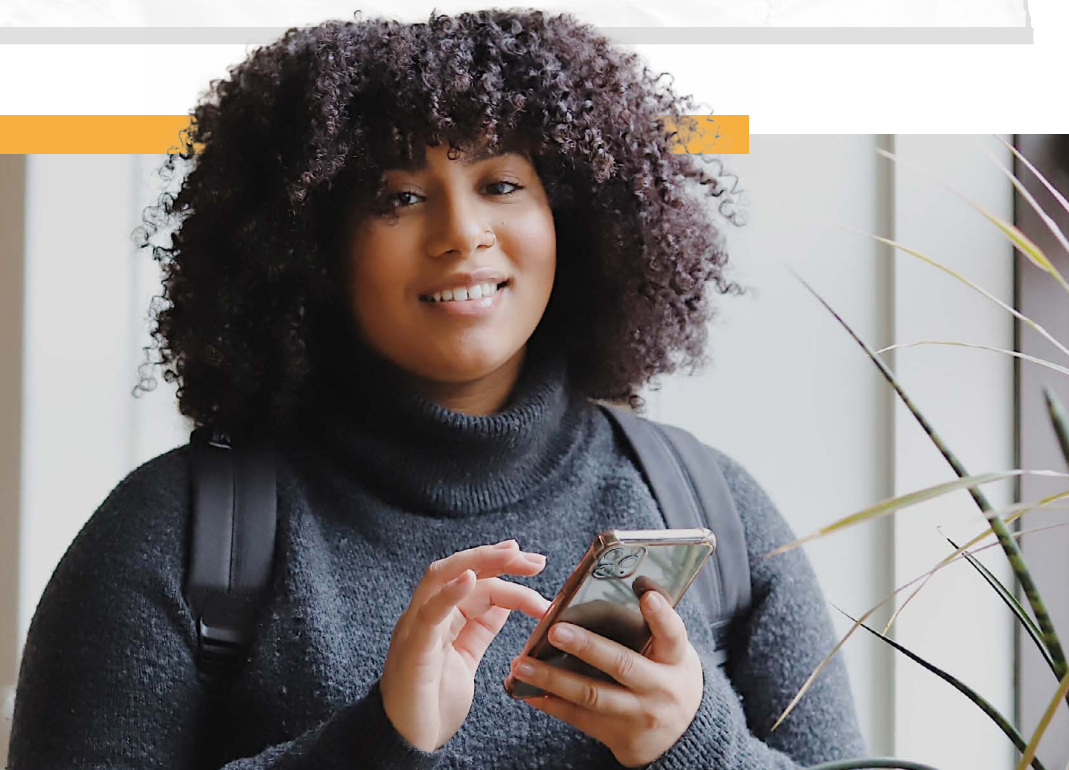another 1-25 Black students

18
would only need to enroll
another 1-25 Latinx students

...to achieve equitable representation in dual enrollment.

Source: The Education Trust—West analysis of fall 2019 data.

Finding 3: Some community college districts are already equitably serving Black, Latinx, and Native American students.

Some CCDs are already doing what they need to do to ensure Black, Latinx, and Native American students are equitably enrolling in dual enrollment courses. In fact, just over one in five (16 out of 72) CCDs have high levels of dual enrollment representation across at least two racial and ethnic groups (see the supplemental in-depth data sheets for full details). Five of those districts have high levels of representation across all three racial and ethnic groups (see Table 1). Five of those districts have high levels of representation across all three racial and ethnic groups (see Table 1). These districts demonstrate that it's possible for local leaders to engage in intentional practices that ensure all students, particularly underrepresented students, are supported to participate in dual enrollment.

Table 1. Community College Districts with high representation across all three racial and ethnic student group

Community College District (CCD)	Campuses in CCD	Percentage of Latinx high school students in this CCD region	Percentage of Latinx Dual Enrollment students in this CCD	Percentage of Black high school students in this CCD region	Percentage of Black Dual Enrollment students in this CCD	Percentage of Native American high school students in this CCD region	Percentage of Native American Dual Enrollment students in this CCD
Foothill-DeAnza	Foothill College, De Anza College	16.5%	22.4%	1.0%	2.0%	0.1%	0.3%
Mendocino-Lake	Mendocino College	40.4%	39.6%	0.8%	1.7%	6.6%	6.1%
MiraCosta	MiraCosta College	31.6%	35.3%	2.1%	5.1%	0.3%	0.9%
Pasadena Area	Pasadena City College	33.5%	42.0%	5.5%	9.9%	0.2%	0.2%
West Kern	Taft College	39.7%	61.4%	5.2%	5.7%	0.8%	1.8%

Source: The Education Trust—West analysis of fall 2019 data.

Jumpstarting equity in dual enrollment: a policy and practice agenda

How Can Education Leaders Meet their Dual Enrollment Goals?

If implemented thoughtfully, dual enrollment can be an effective step towards closing racial equity gaps in postsecondary enrollment and completion. As our analysis demonstrates, LEAs that serve high school students and the state's community college districts must urgently increase the dual enrollment participation of their Latinx, Black, and Native American students. To do so, community college and LEA leaders must work together first to analyze their dual enrollment data and set access, participation, and success goals to eliminate disparities in dual enrollment.

Setting goals can advance equity efforts by establishing shared objectives to focus actions, prioritize available resources, and align stakeholder efforts. Further, these goals can help local leaders, including district leaders, site administrators, and education practitioners engage in goal-oriented practices that prioritize equity. We recommend the following policies and practices as an agenda to jumpstart increased equity in dual enrollment.

Establish dual enrollment goals and engage in data collection and evaluation efforts to inform resource planning.

Community College District Chancellors, LEA Superintendents, and Governing Boards should:

► **Set local dual enrollment goals** with a focus on prioritizing **eliminating racial equity gaps** in participation. Goals should be informed by local data and must be:

  ► Quantifiable (e.g., base enrollments, units earned, course type, section and success rates, GPA, degree, or certificate-based)

  ► Timebound (e.g., a tiered, multi-year approach with incremental goals identified)

  ► Specific (e.g. using disaggregated data to set goals for each racial and ethnic student group)

  ► Informed by input from stakeholders (e.g., site practitioners can provide insights on infrastructure and scalability capacity; students' perspectives can drive course offerings and pathway development)

- **Establish data sharing agreements** for improving and standardizing data around student access, persistence, and success.

- **Evaluate dual enrollment data** to inform resource planning such as fiscal year budgeting, staffing, and student support services.

- **Track and publicly report** ongoing dual enrollment data and progress towards meeting district goals. This should occur on a public-facing resource such as a district or school web page, dashboard, or report.

- **Learn from the campuses that are more equitably serving their students of color and encourage them to disseminate promising practices:**
  - Within districts, create opportunities to collect and share successful campus practices via a dedicated public-facing platform (e.g., website, report, webinar, etc.).

Strengthen and engage in new partnerships between colleges and school districts and direct resources to ensure equitable program expansion.

Community College District Chancellors, LEA Superintendents, and Governing Boards should:

- **Make joint commitments** to establish or increase dual enrollment opportunities for every high school student in their district, prioritizing underserved student groups. (For example, the Los Angeles Unified School District Board of Education resolved to "Accelerate College Access, Awareness and Attainment through Dual Enrollment" as part of a partnership between Local District East and East Los Angeles College).[19]

- **Increase the number of CCAPs and MOUs** to broaden opportunities for students to participate in high-quality, transfer-level college courses.

- For existing partnerships, **expand the number of high-quality dual enrollment courses** offered to scale students' access to college courses, prioritizing underserved student groups.

- **Increase partnerships between schools and community colleges in the district**, prioritizing:
  - High schools with fewer financial resources and those serving a higher number of Black, Latinx, and Native American students.
  - High schools located within the geographic bounds of community college districts where dual enrollment access is limited. (For example,

if a community college district has three campuses, all three should aim to have a similar ratio of partnerships and offerings with their surrounding schools).

- **Collaborate to identify and combine funding streams** for a dedicated, sustainable dual enrollment operating budget. (For example, high school sites can share the costs of hiring a designated dual enrollment community college counselor, data collection specialist, parent engagement staff, and support staff).

Engage in focused recruitment strategies to drive the participation of underrepresented groups.

K-12 Principals and Staff should:

- **Encourage all students to participate in dual enrollment courses and remove barriers** to enrollment. These should include GPA requirements,[20] the number of high school units required to participate in dual enrollment, and subjective principal and counselor recommendations.

- **Leverage dual enrollment as a student success strategy.** For example:
  - Prioritize dual enrollment offerings for students who may need to enroll in an additional semester, or school year, to recover credits lost due to the academic impact of the pandemic.
  - Support meeting college and career readiness as measured in the California School Dashboard's College and Career Indicator (CCI) by successful dual enrollment completion.[21] (For example, Corona Norco Unified School District identifies students who are not on track to being college and career ready and places them, with supports, into dual enrollment coursework to ensure they meet CCI goals).[22]

- **Establish regular and tailored communication** with students and families about dual enrollment opportunities and benefits (e.g., classroom presentations and workshops for students and meetings and webinars in their preferred language for parents).

Community College Presidents and Department Leads should:

- **Include dual enrollment opportunities in campus outreach programming** and collaborate with other college and high school service programs to increase dual enrollment awareness and recruitment (e.g., Umoja, Puente, EOPS, Cal-Soap, AVID, high school college centers).

- **Create a robust set of orientation resources** to support students new to dual enrollment (e.g., virtual hubs, guides, workshops).

- **Designate a dual enrollment liaison or team** to partner with K-12 districts and schools to facilitate case management, access to counseling, and student support services.

- **Leverage student employee capacity** to bolster dual enrollment supports (e.g., peer mentors and teaching assistants to provide additional office hours and tutoring capacity).

Conclusion

California is responsible for educating more than one out of every ten public school students in the nation.[23] Given the state's abundant diversity and economic resources, California's community colleges should offer dual enrollment programs to their students more equitably. This is especially true as we recover from the adverse and inequitable educational outcomes brought on by the pandemic. Far-reaching goal-setting efforts like California Community Colleges' *Vision for Success*[24] show a broad commitment to equity-centered priorities, like increasing attainment for all and closing gaps. Still, local equity efforts are desperately needed at the district and campus levels to realize CCC's vision.

In the aftermath of the pandemic, state and local leaders are implementing new and creative solutions to recovery. It is crucial that in these efforts, leaders center equitable dual enrollment policies and practices, thereby keeping California on a trajectory toward educational equity and racial justice. Our hope is that community college and LEA leaders will leverage goal setting to build momentum in actionable ways for increased dual enrollment outreach, increased buy-in, and increased collaboration. California can, and must, provide Black, Latinx, and Native American students with every opportunity possible to access, participate, and succeed in dual enrollment programs.
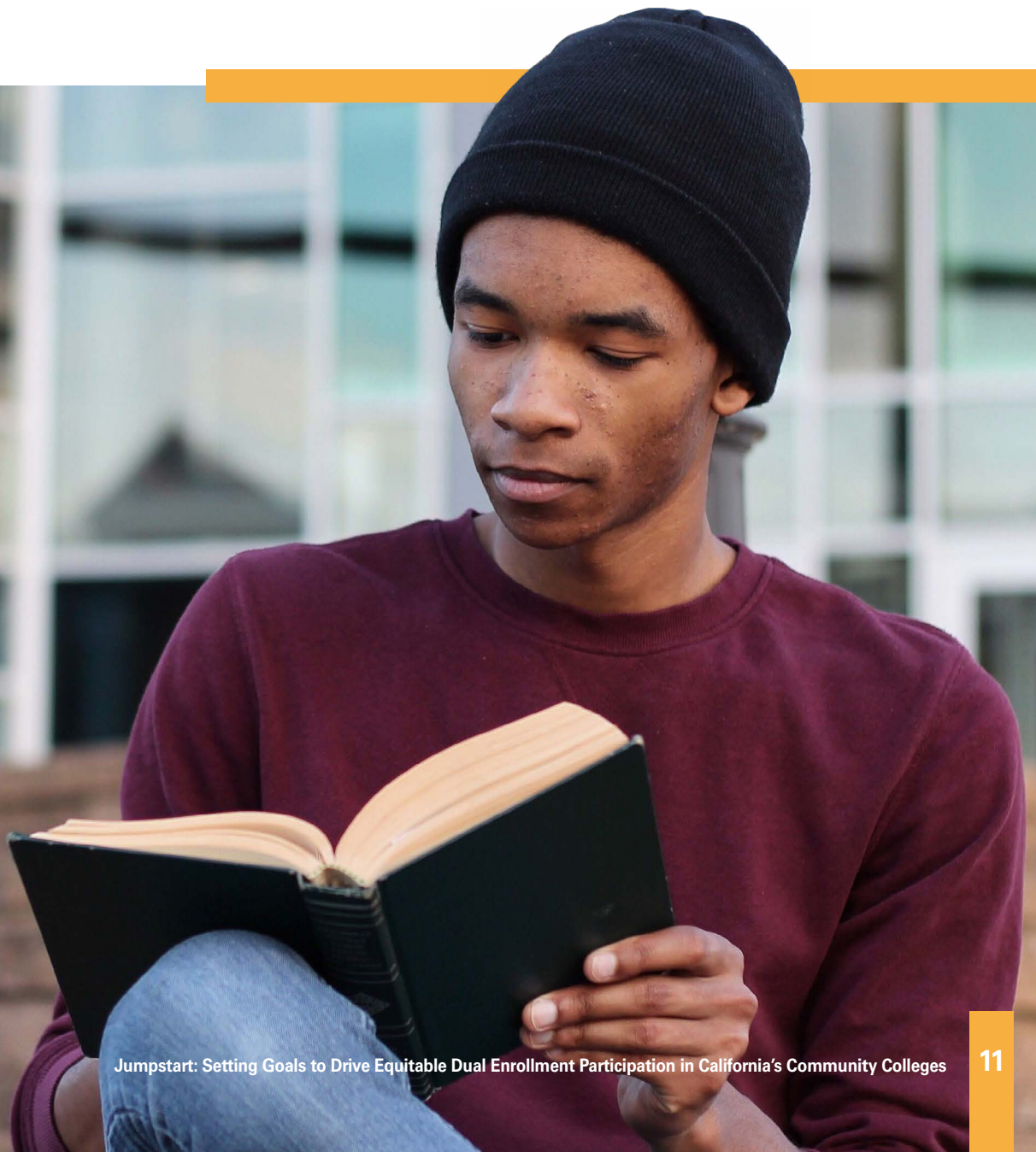
Appendix:
Methodology for Analyzing Dual Enrollment Equity

To analyze equity in dual enrollment (DE) participation among Latinx, Black, and Native American students, we calculated participation scores and assigned equity ratings to each of the 72 community college districts (CCDs)[25] in California, for which Fall 2019 special admit data is available. These ratings are based on the extent to which dual enrollment participation is representative of the demographics of high school students in each CCD's region.

Data on dual enrollment participation at the CCD level is not jointly reported alongside high school enrollment information. As such, the process we used to collect, match, and analyze existing data is detailed here.

Data Sources

We used the following publicly available data sources:

▶ **The California Community Colleges Chancellor's Office (CCCCO) Data Mart.** This source offers summary data on students who concurrently enroll in high school and at a California community college, known as "special admit" enrollees. This report uses Fall 2019 data based on the assumption that pre-pandemic data is more reliable than data gathered during the pandemic. The Chancellor's Office updated Data Mart files in Spring 2020 for all previous years due to a change in reporting criteria. See https://datamart.cccco.edu/datamart.aspx for full details.

▶ **The California Department of Education (CDE).** This source provides enrollment data for high schools through its 2019-20 Census Day Enrollment by School file. Specifically, this report uses enrollment data for 9th through 12th-grade students enrolled in high school during the 2019-2020 school year. To ensure small student group sizes do not disproportionately drive results, only those districts on the K-12 side with 11 or more Latinx, Black, and Native American students, respectively, were included in our analysis. (This cutoff is consistent with CDE data reporting rules for many indicators.)

Calculating Dual Enrollment Equity

We assigned dual enrollment participation scores and associated equity ratings to each CCD based on how representative the racial and ethnic makeup of dual enrollment participants was relative to the demographic makeup of all high school students in the district's service area in Fall 2019. In line with the minimum K-12 enrollment cutoff, 72 districts received ratings based on the dual enrollment participation of Latinx students, 70 districts received scores based on the dual enrollment participation of Black students, and 69 districts received scores based on the dual enrollment participation of Native American students.. Community college districts were selected as the unit of analysis over individual community college campuses since College and Career Access Pathway (CCAP) partnership agreements are between CCDs and LEAs in their service area.

Participation scores measure the extent to which the proportion of dual enrollment participants that identify with a given racial and ethnic group reflects the proportion of high school students in the same group[26]:

$$\text{Dual Enrollment Participation Score} = \frac{\text{Percentage of DE students by race/ethnicity}}{\text{Percentage of 9th - 12th graders by race/ethnicity}}$$

Equity ratings identify how equitable a given CCD's dual enrollment participation is for a given racial and ethnic group. We assigned equity ratings by categorizing participation scores into low, medium, and high representation, using the following scale:

Equity Rating	Participation Score
High Representation	100-90%
Moderate Representation	89.9-70%
Low Representation	<69.9%

True racial and ethnic representation would entail the same percentage of dual enrollment students as high school students enrolled in that CCD. However, special admit data for community colleges includes dual enrollment participants outside of the K-12 system. Therefore, we created a "high representation" range of 90-100 percent to ensure districts were not unfairly assigned a lower rating.

Representation goals reflect our estimates of the number of additional students in each of the three racial and ethnic student groups that CCDs would need to enroll in dual enrollment courses to achieve racial and ethnic representation. For each CCD and racial and ethnic group (regardless of group size), we calculate the estimate by multiplying the difference in the percentage of high school students at the K-12 level and the percentage of dual enrollment students at the CCD level by the total number of high school students taking dual enrollment coursework[27]:

$$\text{Additional Students to Reach Representation} = \left(\text{Percentage of 9th - 12th graders by race/ethnicity} - \text{Percentage of DE students by race/ethnicity} \right) \times \text{Total DE students}$$

Results by student racial and ethnic group for each CCD and our dual enrollment equity map can be found in separate documents for download on the report landing page.

Limitations

High school and community college data are reported separately, creating matching challenges. The Community College Chancellor's Office (CCCCO) provides headcounts of dually enrolled students, captured as "special admit" enrollees, which captures all dual enrollment participants, including those in CCAP and non-CCAP partnerships, students who seek out enrolling on their own,[28] and students who attend private schools or are homeschooled. While we cannot trace CCD dual enrollment counts to their respective high schools, analyzing dual enrollment demographic data within CCD service areas allows stakeholders to better understand equity gaps that likely exist across CCD and K-12 dual enrollment partnerships.

Additionally, our analysis does not capture dual enrollment in the California State University or University of California systems. Data on UC/CSU DE participation is not widely available, and recent legislation (AB 288) only provides an avenue for community colleges, not CSUs/UCs, to enter into CCAP partnerships.

Endnotes

1   Williams, A and Perry, A., "Prioritizing Equity in Dual Enrollment," Education Commission of the States, 2020, Prioritizing_Equity_in_Dual_Enrollment.pdf (ecs.org) ; The following reports do not report Native American student participation rates, see: https://education.ucdavis.edu/sites/main/files/wheelhouse_research_brief_vol_6_no_7_final.pdf; Rodriguez, O., and Gao, N., "Dual Enrollment in California Promoting Equitable Student Access and Success" Public Policy Institute of California, 2021, https://www.ppic.org/publication/dual-enrollment-in-california/

2   Native American student participation rates were not reported in the cited report, see: UC Davis Wheelhouse, "*A Rising Tide: Dual Enrollment is Growing Among California High School Students,*" 2020, https://education.ucdavis.edu/sites/main/files/wheelhouse_infographic_dual_enrollment_1-page_0.pdf

3   Local education agencies include public school districts, charter schools and county offices of education

4   Nguyen, T, "Dual Enrollment and Assembly Bill 288 (CCAP) Legal Opinion 16-02," California Community Colleges Chancellor's Office, 2016, Dual Enrollment and Assembly Bill 288 (CCAP) Legal Opinion 16-02 (ccco.edu)

5   Institute of Education Sciences, "WWC Intervention Report: Dual Enrollment Programs. What Works Clearinghouse" 2017, https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_dual_enrollment_022817.pdf ; Community College Research Center, "What We Know About Dual Enrollment," 2012, What We Know About Dual Enrollment (columbia.edu)

6   "California Legislative Information, "Public schools: College and Career Access Pathways partnerships, Chapter 618, A.B. 288," 2015, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB288; California Legislative Information, "Community Colleges: College and Career Access Pathways partnerships, Chapter 510, A.B. 30,". 2019, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB30

7   Castro, N. and Collins, L., "The Dual Enrollment Landscape: A CLP Working Paper," Career Ladders Project, 2018, DualEnrollmentWorkingPaper_Oct2018_Final.pdf (careerladdersproject.org); California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

8   California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

9   California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

10 Kurlaender, M., Reed, S., Grosz, M., Mathias, J., and Hughes, K., "A Foot in the Door Growth in Participation and Equity in Dual Enrollment in California," UC Davis Wheelhouse, 2021, https://education.ucdavis.edu/sites/main/files/wheelhouse_research_brief_vol_6_no_7_final.pdf

11 Other forms of structured dual enrollment partnerships not covered in this report include Early College High Schools and Middle College High Schools. For more details on these types of colleges. For additional data points and information for these programs see: https://education.ucdavis.edu/sites/main/files/wheelhouse_research_brief_vol_6_no_7_final.pdf; Rodriguez, O., and Gao, N., "Dual Enrollment in California Promoting Equitable Student Access and Success" Public Policy Institute of California, 2021, https://www.ppic.org/publication/dual-enrollment-in-california/

12 California Legislative Information, "Public schools: College and Career Access Pathways partnerships, Chapter 618, A.B. 288," 2015, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB288; California Legislative Information, "Community Colleges: College and Career Access Pathways partnerships, Chapter 510, A.B. 30,". 2019, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB30

13 California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

14 California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

15 Career Ladders Project, "Comparison of Non-AB 288 Agreements and AB 288," 2016, https://www.careerladdersproject.org/wp-content/uploads/2015/12/AgreementsComparisonTable-DETOOLS.pdf

16 CCAP agreements for college courses that are oversubscribed or that are have a waitlist are prohibited. See: California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

17 California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (ccco.edu)

18 Some sources include Calbright Community College, an online-based college, as a separate district. Because we use a geographical analysis, we have excluded Calbright College in our analysis.

19 Los Angeles Unified School District, "Los Angeles Unified Commits to Accelerate College Access, Awareness, and Attainment through Dual Enrollment" 2021, Los Angeles Unified Commits to Accelerate College Access, Awareness, and Attainment through Dual Enrollment (9-14-2021) (lausd.net)

20   For both CCAP and non-CCAP agreements, districts cannot restrict admission or enrollment based on high school GPA, see: Nguyen, T, "Dual Enrollment and Assembly Bill 288 (CCAP) Legal Opinion 16-02," California Community Colleges Chancellor's Office, 2016, Dual Enrollment and Assembly Bill 288 (CCAP) Legal Opinion 16-02 (cccco.edu)

21   California Department of Education, "California School Dashboard College/Career Readiness," 2018, College/Career Readiness - CA School Dashboard (CA Dept of Education)

22   Montgomery, J., & Harris, K., "CCI and Dual Enrollment-Preparing Students for College and Career" [Conference presentation], California Coalition of Early and Middle College's 7th Annual Dual Enrollment Summit, 2020, September 25.

23   Calculation based on the following data sources: National Center for Education Statistics, "Fast Facts, Back-to-School Statistics," 2021, Fast Facts: Back-to-school statistics (372) (ed.gov); California Department of Education, "Data Quest 2020-21 Enrollment by Ethnicity and Grade State Report," 2021, Enrollment by Ethnicity and Grade - State (CA Dept of Education)

24   Foundation for California Community Colleges, "Vision for Success, Looking Ahead: Goals for Meeting California's Needs," Looking Ahead — Vision for Success (foundationccc.org)

25   California Community Colleges Chancellor's Office, "Community Colleges Districts," https://www.cccco.edu/Students/Find-a-College/Community-College-Districts

26   A similar analytic approach was used to analyze the accessibility of selective public universities for Black and Latinx students in: Andrew Nichols, "Segregation Forever? The Continued Underrepresentation of Black and Latino Undergraduates at the Nation's 101 Most Selective Public Colleges and Universities"(Washington, D.C.: The Education Trust, July 2020), https://edtrust.org/resource/segregation-forever/.

27   This method was shared by The Education Trust in an informational webinar. Andrew Nichols, "Segregation Forever? The Continued Underrepresentation of Black and Latino Undergraduates at the Nation's 101 Most Selective Public Colleges and Universities. California Findings [Webinar]"(Washington, D.C.: The Education Trust, July 22, 2020).

28   Some adult dually enrolled student are also reported as "Special Admits" see: California Community Colleges Chancellor's Office, "College and Career Access Pathways Legislative Report," 2021, College and Career Access Pathways Legislative Report (cccco.edu)

Acknowledgments