

CTE Transitions: Early College Credit through Credit by Exam 2016-17 to 2020-21

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CTE Transitions Report, 2016-17 to 2020-21

This report examines the San Diego Community College District's Career and Technical Education (CTE) Transition Program. This program provides students in SDUSD high schools with an opportunity to earn college credit through demonstrating mastery in pre-approved CTE courses offered in their high schools (called credit by exam or CBE-eligible courses). The goal of this program is to help students get an early start on their pathway to a college degree and/or career in a CTE field.

This report is organized in four components:

1. Introduction

- 2. Participation in the CTE Transitions Program at SDUSD high schools. Includes headcount, enrollment trends, participation by high school, and overall demographics. This data reflects what the CTE Transitions program looks like at SDUSD school sites and reflects the potential number of units that could be earned in the program.
- Outcomes of the CTE Transitions Program. Includes data regarding student progress
 through four checkpoints which must be completed to receive credit for CBE-eligible
 CTE courses.

This section also includes analysis of progress through these checkpoints by high school, subject, ethnicity, gender, special education status, and language.

Recommendations are made to address equity gaps among these groups.

Figure 1. 2020-21 Enrollments by Checkpoint



4. CTE Transitions students who enroll at SDCCD. High School Graduation Year cohorts include all students who ever received credit in a CBE-eligible CTE course and graduated in the given year.

Grad Year	Possible Years in CTE Transitions	Cohort Size
2017	2013-14 to 2016-17	399
2018	2014-15 to 2017-18	901
2019	2015-16 to 2018-19	1,099
2020	2016-17 to 2019-20	1,119

Executive Summary

- The CTE Transitions Program served 66% more students in 2020-21 than five years ago, but growth has varied over the last three years. 2018-19 saw a decrease in number of students served, 2019-20 saw a dramatic increase, and 2020-21 (when instruction was moved online due to the COVID-19 Pandemic) saw slightly fewer students enrolled in CBE-eligible CTE courses than the prior year (-3%).
- Scripps Ranch, Patrick Henry, and Kearny High Schools accounted for the largest numbers of enrollments over the last five years (2,349; 2,168; 1,919, respectively). Mira Mesa High School had the most enrollments in 2020-21 (549), a 48% increase from the prior year for that site. Other sites which saw large increases in enrollments in 2020-21 compared to the prior year were SDSCPA (+145 enrollments, or +117%), Hoover (+169 enrollments, or +54%), and Morse (+70 enrollments, or +26%).
- As in prior years, Engineering accounted for the largest number of enrollments in 2020-21 (1,185 of 5,528, or 21%); it should be noted that the number Engineering enrollments decreased dramatically (-709, or -37%) compared to 2019-20. This subject is highly male-dominated (74% of enrollments in 2019-20 were accounted for by male students). High school courses articulated to Engineering (ENGN) were offered at 13 of the 20 SDUSD schools with active CBE agreements in 2020-21.
- 1,698 enrollments received credit in 2020-21. This was 31% of all enrollments and 84% of grade-eligible enrollments. Students earned more than 3,700 college units. The rate of grade-eligible students who receive college credit increased every year from 2016-17 to 2018-19 from 47% to 75%. COVID-19 severely impacted the rate at which grade-eligible students received credit: as of last year's report, only 57% of grade eligible students received credit in 2019-20. A focused effort was made to follow up with students since that report, and additional college credits were processed. As of November 2021, 74% of grade-eligible students in 2019-20 have received credit. The upward trend has resumed in 2020-21, with 84% of grade-eligible students receiving credit.
- 332 students were grade-eligible to receive college credit (completed academic requirements) but did not complete the required steps to receive that credit. This was 16% of those eligible to receive credit, a significant improvement from 2019-20 when 26% of grade-eligible enrollments did not receive credit.
- Groups that were disproportionately impacted in earning credit in the program² in 2020-21 included students who were Latinx, African American, Pacific Islander, in special education, and students whose primary language was Spanish, Somali, and Lao.
- 46% of students who earned credit through the CTE Transitions program and graduated high school between 2017 and 2020 ended up enrolling at SDCCD. The rate for the most recent cohort 36% is comparable to the overall re-enrollment rate for SDUSD graduates (32%).

² Rates (earned credit divided by **total enrollments**) for each group were compared to a reference group.

¹ This reflects the most recent data, as of November 2021.

Introduction

The State of California has a history of investing heavily into career and technical education (CTE) pathways, aiming to reach students as early as seventh grade and introduce them to fields of study and potential new careers. The California Department of Education, which oversees all K-12 education institutions in the state, supports the creation and maintenance of 58 CTE pathways. CTE pathways involve a "multiyear sequence of courses that integrates core academic knowledge with technical and occupational knowledge to provide students with a pathway to postsecondary education and careers" (CTE Website, California Department of Education).

Fifteen sectors in which CTE pathways are embedded in K-12 Education in California						
Agriculture and Natural Resources	Health Science and Medical Technology					
Arts, Media, and Entertainment	Hospitality, Tourism, and Recreation					
Building and Construction Trades	Information and Communication Technologies					
Business and Finance	Manufacturing and Product Development					
Education, Child Development, and Family Services	Marketing, Sales, and Services					
Energy, Environment, and Utilities	Public Services					
Engineering and Architecture	Transportation					
Fashion and Interior Design						

Under the high school CTE course articulation process, the California Community College Chancellor's Office works with the California Department of Education to align CTE pathways to high school courses. This alignment is intended to support students as they transition from high school graduation to community college to earn a certificate, degree, and/or meet the requirements to transfer to a four-year college or university in a CTE field. The end goal is to support students in earning the necessary credentials to be qualified and successful professionals in their fields.

San Diego City, Mesa, and Miramar Colleges partner with San Diego Unified School District high schools to identify courses that facilitate college-level mastery of a college career education course. Faculty support for agreement development, implementation, and management is centralized at the SDCCD district office within Educational Services and within SDUSD's District CCTE Office. Under faculty-led CTE Transitions credit by examination (CBE) agreements, students who are able to demonstrate content and skill area mastery at the college-level become eligible for college credit at City College, Mesa College, and/or Miramar College. Students demonstrate college-level content and skill area mastery through: (1) receiving an A or B in the aligned class, (2) receiving an A or B on an exam approved by college faculty, and (3) applying for and receiving credit.

This report provides an overview of the SDCCD's CTE Transitions Program, as well as examines the success of the program in helping students earn college credits and transition from K-12 to college. It also seeks to identify ways that SDCCD and SDUSD can work together to widen the

pipeline of students entering CTE pathways and address equity challenges within that pipeline. Page 8 lists the research questions embedded in this report.

Notes regarding data

Data Sources: Data for academic years 2016-17 to 2018-19 was accessed through CATEMA, an online system which collects enrollment, credit recommendations (whether or not an enrollment was recommended for credit), and demographic data. As part of a strategic partnership to increase efficiency and remove barriers for students, the use of CATEMA ended in 2019. Data for 2019-20 and 2020-21 was provided by SDUSD. Data for high school enrollment (enrollment by ethnicity at SDUSD high school sites) was collected from the California Department of Education (CDE) <u>Dataquest</u> website.

Better Data: Improved access to data made possible through the partnership with SDUSD in 2019-20 and 2020-21 has made it possible to track student progress through four checkpoints students must complete in order to receive credit for CBE-eligible CTE courses:

- 1. **Enrolled**: All students who enrolled in CBE-eligible CTE course during the 2019-20 academic year
- 2. Met Course Requirement: All students who received an A or B in the high school course
- 3. Met End of Course (EOC) Requirement: All students who met course requirements and received an A or B on the end-of-course requirement. Students who complete this checkpoint are grade-eligible for college credit, meaning that they have completed all grade-based requirements to earn college credit. These students must still complete two key logistical steps to receive college credit for their high school coursework: complete an application to SDCCD, and sign a petition for college credit (parents must also sign the petition for students under 18).
- 4. **Received Credit**: Grade-eligible students who completed the two required logistical steps to receive college credit.

Additional resolution about the gap between grade-eligible students and those who received credit is available for 2020-21 enrollments; this level of detail shows which step of the petition process students complete or do not complete and are key to informing meaningful interventions at the local site level.

COVID-19 Impact: Due to the COVID-19 Pandemic, contact with students and families was abruptly interrupted in the Spring of 2020. In prior years, students received information via email, in-person from their teachers in class, and in-person from administrators and counselors at their school sites; after instruction was moved online in Spring 2020, all student contact was restricted to email.

This barrier to communication led to a high proportion of grade-eligible students not completing the logistical steps to receive college credit during the typical processing window for the 2019-20 academic year: as of October 2020, 43% of grade-eligible students had not received college credit for coursework completed during the 2019-20 academic year. SDUSD and SDCCD continued to reach out to students and families and process petitions for 2019-20 through the 2020-21 academic year. Due to this work, that percentage dropped to 26% as of November 2021.

Research questions

- 1) In which CBE-eligible CTE courses do students enroll the most? Which school sites and subjects account for the most enrollments?
- 2) What is the composition of students who are enrolling in CBE-eligible courses?
- 3) How many students demonstrate competency in CBE-eligible courses?
- 4) How many students who receive credit by exam from local school districts end up enrolling at SDCCD?
- 5) What opportunities exist to address equity challenges (a) within the program pipeline and/or (b) across the program's implementation in the San Diego region?

Definitions

- Career and technical education (CTE) pathway: "A program of study that involves a multiyear sequence of courses that integrates core academic knowledge with technical and occupational knowledge to provide students with a pathway to postsecondary education and careers" (CDOE n.d.)
- CTE Transitions Credit by Examination Agreement: Faculty-led agreements between one or more of SDCCD's credit colleges (City College, Mesa College, and/or Miramar College) to grant college credit to students demonstrating mastery in an approved career and technical education high school course
- **Credit by examination or CBE-eligible course:** A career and technical education high school course that is covered under a credit by exam agreement between SDCCD and local area high schools
- **Demonstration of mastery:** Student received an A or B in the CTE course and on a final exam approved by college faculty in SDCCD's credit colleges
- Disproportionate impact: A difference in representation between a starting cohort and those who achieve a desired outcome that is statistically significant. This report identifies instances of disproportionate impact in representation among all CBE-eligible CTE enrollees and those who received credit. Three methods of calculating disproportionate impact (Percentage Point Gap Index, 80% Index, and Proportionality Index) were evaluated in this report; differences in representation identified as disproportionate impact by at least 2 of these methods are indicated with an * in tables and graphs.
- **Enrollment**: Number of students in a course (duplicated in analyses of more than one class section)
- **Headcount**: Number of SDUSD students who enrolled in a CTE high school course covered under a credit-by-exam agreement with City, Mesa, or Miramar College, unduplicated

Overview of CTE Transitions Credit by Examination Opportunities with SDUSD

The San Diego Community College District (SDCCD) operates the CTE Transitions program with high schools in the San Diego Unified School District (SDUSD). Figure 2 below shows the number of high school courses covered by credit by examination agreements between SDCCD's three credit colleges and SDUSD high schools. Students who demonstrate mastery in these courses have the opportunity to earn college credit for their high school coursework.

As shown in Figure 2, the number of college courses covered by CTE Transitions agreements has varied over the last five years. Agreements may not be renewed in courses as part of a strategic emphasis on courses which result in more students enrolling at SDCCD, courses for which there is high student demand for college credit, and courses which are connected to certificate and/or degree completion opportunities.

Changes to college courses covered by CBE agreements in 2020-21 compared to 2019-20 are:

- Engineering 101 is no longer covered (13 schools still had active agreements for Engineering 130 – Introduction to Engineering Design)
- Nutrition 160; Photography 243; and Radio, Television, and Film 124 were covered by agreements in 2020-21

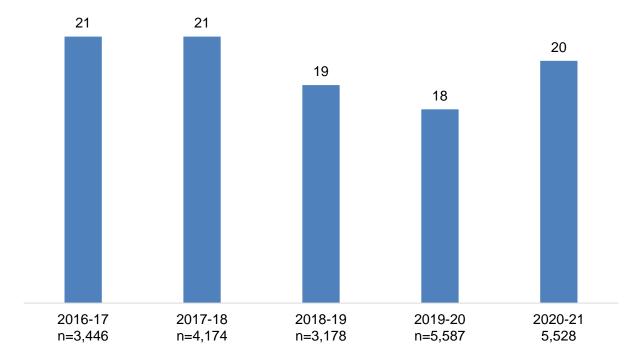


Figure 2. Count of College Courses connected to CTE Transitions CBE agreements

Note. "n=" refers to the total enrollments each academic year (enrollments are duplicated instances of students taking classes, so one student in two classes is counted twice).

High School Pathway CBE Articulation Rate

Of the 28 CTE pathways offered at SDUSD high schools, the 12 shown in Table 1 are articulated to opportunities to earn college credit through CBE agreements. Five such pathways were fully articulated in 2020-21, meaning CBE agreements were active at all high school site where those pathways were offered. These fully articulate pathways include Production and Managerial Arts, Engineering Technology, Biotechnology, and Child Development.

Other pathways were not fully articulated in 2020-21, meaning they were offered at school sites that did not have active CBE agreements. These pathways included Architectural Design (articulated at 3 out of 4 schools) and Games and Simulation (articulated at 1 out of 2 schools). See Table 2 for a list of high schools with that offer pathways not connected to CBE opportunities in 2020-21.

Pathways offered at more than one high school for which no CBE opportunities exist are Patient Care; Systems Diagnostics, Services & Repair; Marketing; Residential and Commercial Construction; Financial Services; Graphic Production Technologies; and Hospitality, Tourism, and Recreation. Nine additional pathways are offered at one high school with no CBE agreements.

Table 1. CBE-articulated Pathways offered at SDUSD High Schools, 2020-21

Pathway	High Schools with Pathway	High Schools with Articulated Agreements	% Articulated
Production and Managerial Arts	13	13	100%
Engineering Technology	11	11	100%
Child Development	6	6	100%
Food Service and Hospitality	5	5	100%
Emergency Response	1	1	100%
Biotechnology	9	9	100%
Design, Visual, and Media Arts	11	9	82%
Architectural Design	4	3	75%
Education	4	3	75%
Games and Simulation	2	1	50%
Business Management	3	1	33%
Software and Systems Dev.	13	3	23%

Data source: Office of College, Career and Technical Education, SDUSD. Analysis by SDCCD Office of Institutional Effectiveness and Research.

Table 2 below shows SDUSD high schools that offer courses in CTE pathways but that did not have active CBE agreements in 2020-21. These pathways were connected to active CBE agreements at other schools.

Table 2. Unarticulated Pathways, 2020-21

Pathway	High School with Pathway not currently connected to CBE opportunity	Most relevant college course with existing agreement at other high school
Design, Visual, and Media Arts	SDHS (Int'l Studies)	PHOT 143/ARTG 125
Education	Hoover High	EDUC 200 & 203
Games and Simulation	SDHS (Int'l Studies)	MULT 120
Business Management	SDHS (Bus. & Lead.); SD MET	CBTE 101 & 120
Software and Systems Dev.	Crawford, Henry, La Jolla, Lincoln, Mission Bay, Morse, SDHS (Int'l Studies; Sci. & Tech), Scripps, University City	MULT 120/GISG110

Participation in the CTE Transitions Program at SDUSD high schools

CTE Transitions Program Size Varies by Year

This section examines headcount in CTE Transitions CBE-eligible high school courses at SDUSD high schools, which represents the unduplicated count of all students at the beginning of the CTE CBE Transitions pipeline.

From 2016-17 to 2020-21, the number of students enrolled in in CTE CBE-articulated courses at SDUSD high schools increased by 66%. Enrollment in these courses grew until 2018-19, when there was a 24% decrease compared to the prior year. 2019-20 saw nearly twice as many students enroll (+90%).

Compared to 2019-20: Slightly fewer students enrolled in 2020-21 than in 2019-20 (-131 students, or -3%). This decrease is less than what was seen in the CCAP program over the same period; that early college credit program saw an 11% decrease in students served from the 2019-20 to 2020-21 school years.

On average, SDUSD students enroll in about 1 CTE CBE-articulated course per year.

3,008 3,544 2,695 5,110 4,979 2016-17 2017-18 2018-19 2019-20 2020-21

Figure 3. Headcount in SDUSD CTE courses tied to active CBE agreements, by Year

Note. Compared to prior reporting, there are slight variations in headcount by academic year (~1%) based on updated data processing procedures for 2016-17 and 2017-18. Data shown in this report for 2019-20 reflects improved data collection processes compared to prior reporting.

Demographics of CTE Transitions

Ethnicity: Of the 4,979 SDUSD students who enrolled in a CTE Transitions CBE-eligible course in 2020-21, Latinx students were the largest group (2,094 students or 42% of the total). The next largest group was white students (1,204, 24%), followed by Asian students (550, 11%).

Representation of Latinx students has grown over the last five years, from 31% in 2016-17 to 42% in 2020-21.

Across the CTE CBE-articulated courses at SDUSD in 2020-21, representation by ethnicity was similar to the high schools at which CTE CBE-articulated courses were offered. Nonetheless, there were seven schools at which African American students were disproportionately impacted in access to CTE Transitions CBE courses³ in 2020-21 (see Table 3 on next page).

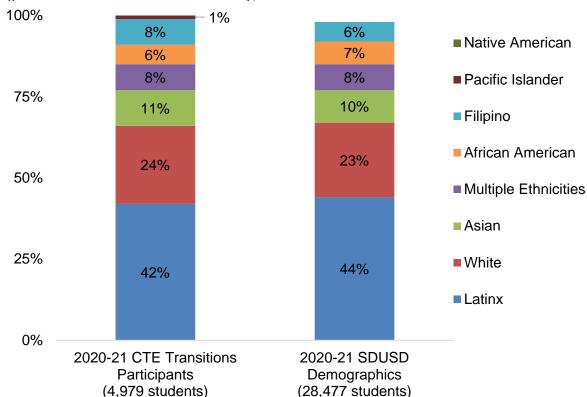


Figure 4. CTE Transitions Student Ethnicity, 2020-21

Gender: In 2020-21, SDUSD students who enroll in CTE CBE-articulated courses were **more likely to be male** (57%) than female (43%). The representation of male students has decreased slightly since 2019-20, when it peaked at 61%.

See page 18 for more detail on gender representation by subject.

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³ These are sites at which representation of African American students in CTE CBE-eligible courses was less than 80% of representation of African American students at that school site.

Disproportionate Impact in Enrollment in CTE CBE-articulated courses

The largest groups of disproportionately impacted African American students in access to CTE Transitions courses were at Henry High (150 students DI), Mira Mesa High (89 students DI), and Mission Bay High (57 students DI). The 669 Latinx students at UCHS and 333 Latinx students at La Jolla High were also disproportionately impacted in access.

Disproportionate impact (DI) in Access was identified for school sites at which representation among CTE CBE-articulated courses was less than 80% of representation at that school site. Table 3 shows sites where DI in Access was identified. For example, African American students made up 2.7% of students enrolled in CTE CBE-eligible courses at Mira Mesa High School compared to 3.8% of students school-wide (2.7% is less than 80% of 3.8%).

In Table 3, students enrolled in CTE CBE-articulated courses are included in the **Students in CTE CBE** column. Student headcount and representation at each site is included in the **Students at High School** column.

Table 3. 2020-21 DI Groups in Access

	Repres	entation	Headcount		
Ethnicity	School	Students in CTE CBE	Students at High School	Students in CTE CBE	Students at High School
	Clairemont High	0.4%	1.6%	1	14
	East Village HS	4.0%	5.5%	1	7
A f	Henry High	2.9%	5.8%	10	150
African American	Mira Mesa High	2.7%	3.8%	14	89
American	Mission Bay High	2.9%	4.8%	7	57
	Point Loma High	1.2%	2.5%	4	45
	Scripps Ranch High	1.8%	2.4%	8	49
	Henry High	0.6%	1.8%	2	46
Filipino	Mission Bay High	0.4%	1.0%	1	12
	SDHS	0.3%	0.8%	1	20
Latinx	La Jolla High	15.6%	25.2%	22	333
Laurix	University City High	23.9%	38.4%	51	669
Pacific Islander	Mission Bay High	0.4%	0.7%	1	8
	Hoover High	1.1%	1.5%	5	32
	Madison High	5.5%	14.9%	3	139
White	Morse High	0.6%	1.8%	2	32
	SDHS	7.7%	14.6%	25	370
	Twain High	7.1%	10.0%	14	25

Data Source: High school population data from California Department of Education (CDE) Dataquest.

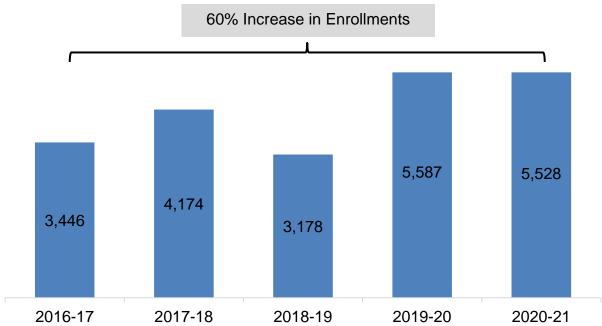
Note. High schools with large (greater than 50) populations of disproportionately impacted Latinx and African American students indicated in bold.

CTE Transitions Enrollment Trends: Generally increasing enrollments

This section examines enrollment in CTE Transitions CBE-eligible high school courses, which represents the duplicated count of enrollments⁴ at the beginning of the CTE Transitions pipeline. These enrollments are representative of the number of units that could potentially be earned through participation in CTE Transitions.

Enrollments in CTE Transitions CBE-eligible courses increased each year until 2017-18, decreased in 2018-19 (-24% from prior year), increased dramatically in 2019-20 (+76% from prior year), and then decreased slightly in 2020-21 (-59 enrollments or -1%). Trends in unduplicated headcount have generally followed year-to-year changes in duplicated enrollments.





Note. Compared to prior reporting, there are slight variations in headcount by academic year (~1%) based on updated data processing procedures for 2016-17 and 2017-18. Data shown in this report for 2019-20 reflects improved data collection processes compared to prior reporting.

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⁴ Enrollments are classroom seats: one student who enrolls in two is counted twice.

By High School

Over the five years of data covered by this report, Scripps Ranch and Patrick Henry enrolled the most students in CTE Transitions CBE-eligible courses (2,346 and 2,168 enrollments, respectively). Mira Mesa High School saw the most enrollments in CBE-eligible CTE courses in 2020-21, at 549, followed by Hoover (483) and Scripps Ranch (458).

From 2019-20 to 2020-21, enrollment in CBE-eligible CTE courses decreased at 13 of the 21 SDUSD high schools. This includes a decrease of almost 400 enrollment across Scripps, Henry, and Kearny (-136, -154 and -103 enrollments). University City and SDHS also saw large decreases in enrollment (-94 and -122). Schools that saw increases compared to the prior year included Mira Mesa (+177 enrollments), Hoover (+169), and SDSCPA (+145).

Table 4. Enrollments by High School

	2016-17	2017-18	2018-19	2019-20	2020-21	19-20 to 20-21 Diff.	19-20 to 20-21 % Change
Scripps Ranch	355	511	428	594	458	-136	-23%
Henry	397	429	414	541	387	-154	-28%
Kearny	268	386	330	519	416	-103	-20%
Mira Mesa	306	259	232	372	549	177	48%
University City	339	437	318	340	246	-94	-28%
SDHS	338	207	189	449	327	-122	-27%
Twain	231	304	150	324	391	67	21%
Point Loma	206	276	201	267	346	79	30%
Morse	220	296	153	272	342	70	26%
Canyon Hills	183	279	136	300	274	-26	-9%
Hoover	45	34	50	314	483	169	54%
Clairemont	72	174	91	285	238	-47	-16%
Mission Bay	97	193	24	269	241	-28	-10%
Garfield	49	119	92	146	166	20	14%
La Jolla	72	109	90	144	143	-1	-1%
San Diego SCPA	63	25	71	124	269	145	117%
Lincoln	6	76	119	148	111	-37	-25%
Madison	74	51	74	108	55	-53	-49%
Crawford	116	5	2	57	41	-16	-28%
Mt. Everest	8	3	0	14	10	-4	-29%
East Village	0	0	0	0	28	28	
SET	0	0	14	0	0	0	

Note. Table sorted by total enrollments over five years.

By Subject of College Course

Over the last five years, there have been nearly 22,000 enrollments in CTE Transitions CBE-eligible courses at SDUSD (21,913). Engineering has accounted for the largest group of these enrollments (6,904 enrollments, 32% of the total), followed by Graphic Design (3,002 enrollments, 14%), and Multimedia (1,991, 9%). Child Development, Computer Business Technology, and Biology each accounted for 8% of enrollments over the last five years, or about 1,700 enrollments each.

Subjects which saw the largest increases in enrollment from 2019-20 to 2020-21 were Photography (+205%), Computer Business Technology (+29%), Biology (+27%), and Radio, Television, and Film (+26%).

CBE-eligible courses articulated to college courses in Multimedia, Engineering, and Machine Technology saw large decreases in 2020-21 compared to 2019-20 (MULT: -47%, ENGE: -37%, MACT: -65%).

While Nutrition was first articulated in 2020-21, it had the third-most enrollments (560), behind only Engineering (1,185) and Graphic Design (769).

Table 5. Enrollments by College Subject

	2016-17	2017-18	2018-19	2019-20	2020-21	19-20 to 20-21 Diff.	19-20 to 20-21 % Change
ENGE	1,128	1,510	1,187	1,894	1,185	-709	-37%
ARTG	576	550	402	705	769	64	9%
MULT	313	347	439	584	308	-276	-47%
CHIL	250	410	325	379	361	-18	-5%
CBTE	284	581	164	282	364	82	29%
BIOL	287	214	267	397	506	109	27%
CACM	113	279	127	438	368	-70	-16%
RTVF	0	0	102	371	467	96	26%
EDUC	150	179	69	129	131	2	2%
PHOT	31	33	58	114	348	234	205%
NUTR	0	0	0	0	560	560	
GISG	75	51	30	83	53	-30	-36%
MACT	50	0	0	165	57	-108	-65%
AUTO	124	0	0	0	0	0	
FIPT	6	3	8	46	51	5	11%

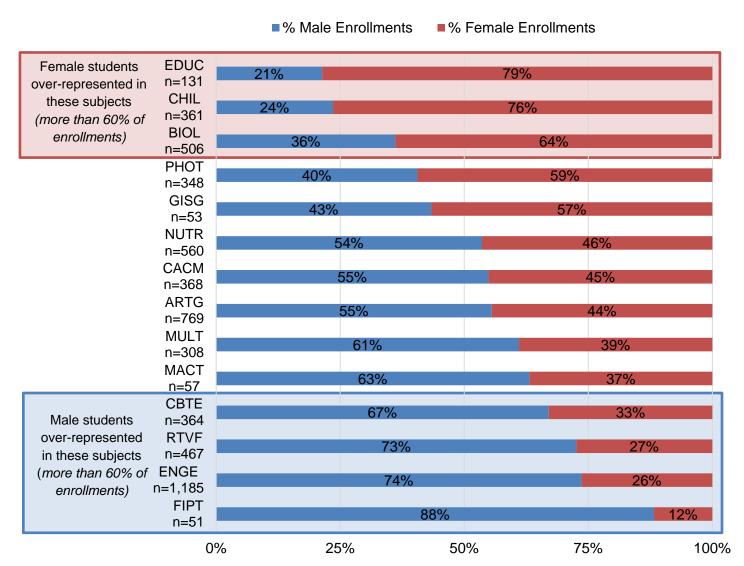
Note. Table sorted by total enrollments over five years.

Subject Enrollment Patterns by Gender

As in prior years, there were strong gender patterns in CTE Transitions CBE-eligible courses by college-course subject in 2020-21. Notably, female students were under-represented in Engineering (ENGE), accounting for just 26% of enrollments in that subject. This under-representation drove the overall under-representation of female students in CTE Transitions courses, although to a lesser extent than in prior years. This relationship is most visible when examining enrollments with Engineering excluded: of the 4,338 non-Engineering enrollments in 2020-21, 48% were by female students and 52% are by male students, somewhat closer to parity than the 44%-56% actual distribution of overall enrollments. This underrepresentation at the beginning of the CTE Transitions pipeline exemplifies the challenges of increasing access to jobs in STEM fields for female students.

It should be noted that the overall under-representation of female students in CTE Transitions courses has improved since 2019-20, when the female enrollments accounted for 40% of the overall (-4% compared to 2020-21).

Figure 6. 2020-21 Subject of College Course Representation by Gender



Gender Under- and Over-representation by Subject over Time

Male over-representation in Fire Protection (FIPT), Engineering (ENGE), and Computer Business Technology (CBTE) has been persistent over the last five years, with male students accounting for well over half of enrollments in each year.

This trend is particularly noteworthy in CBE-eligible courses articulated to college courses in Engineering, which was the largest CTE subject by enrollment in each of the last five years.

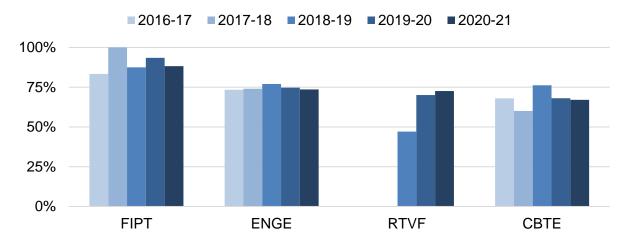


Figure 7. Percent of enrollments by male students in male-dominated subjects in 2020-21

Female over-representation in Child Development (CHIL) and Education (EDUC) has been persistent over the last five years, with female students accounting for three-quarters of enrollments in CBE-eligible courses articulated to college courses in Child Development and Education.

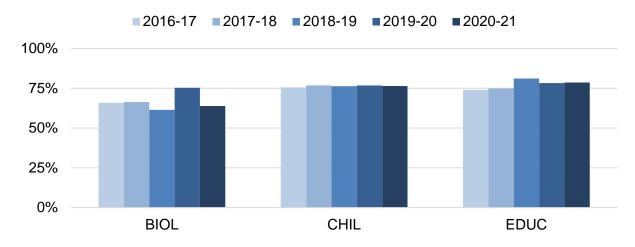


Figure 8. Percent of enrollments by female students in female-dominated subjects

By Ethnicity

Table 6 shows enrollments in CTE Transitions CBE-eligible courses by ethnicity in 2020-21. College-course subjects in which an ethnicity is over-represented are green; college-course subjects in which an ethnicity is under-represented are red⁵. Trends from this table reflect districtwide representation; not all subjects are available for CBE at all schools, and local population trends may affect these outcomes. This effect is more relevant for subjects for which CBE is available at fewer schools, such as CBTE (only offered at Twain), and less relevant for subjects for which CBE is available at more schools, such as ENGE (offered at 13 schools).

African American students were under-represented in Child Development (offered at 5 schools). Latinx students were under-represented in Graphic Design (8 schools). Filipino students were under-represented in Engineering (13 schools); Radio, Television, and Film (10 schools), and Child Development (5 schools).

Subjects not shown in Table 6 below are MACT, GISG, and FIPT due to low enrollments (all less than 60).

Groups not shown in Table 6 below are Pacific Islander and Native American students. Pacific Islander students were underrepresented in Engineering (0.3% of Engineering enrollments compared to 0.6% of all enrollments).

Table 6. 2020-21 Enrollment Representation by Ethnicity and Subject of College Course

	ENGE n=1,185	ARTG n=769	NUTR n=560	BIOL n=506	RTVF n=467	CACM n=368	CBTE n=364	CHIL n=361	PHOT n=348	MULT n=308	EDUC n=131	Overall n=5,528
Other	1%	1%	2%	0%	1%	2%	2%	1%	1%	1%	3%	1%
African American	5%	5%	7%	5%	7%	7%	9%	3%	7%	6%	8%	6%
Filipino	4%	9%	12%	11%	3%	8%	7%	3%	19%	8%	24%	8%
Mult. Ethnicities	10%	10%	6%	7%	6%	2%	7%	7%	7%	13%	7%	8%
Asian	12%	14%	11%	18%	8%	7%	7%	8%	6%	7%	8%	11%
White	31%	36%	5%	27%	27%	5%	6%	25%	24%	28%	19%	23%
Latinx	37%	25%	57%	32%	49%	68%	62%	53%	36%	37%	31%	43%

Note. Other includes Pacific Islander, Native American, and Unreported ethnicities due to low enrollment counts.

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⁵ Instances of over- and underrepresentation were determined in cases where representation in a subject was 40% more or 40% less than overall representation. For example, African American students made up 9% of CBTE enrollments compared to 6% of overall enrollments, and were over-represented by 50% in this subject.

Outcomes of the CTE Transitions Program at SDUSD high schools

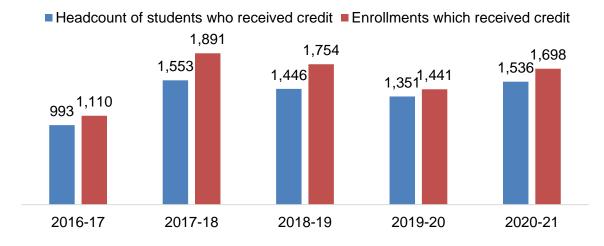
In this section we examine the enrollments that received college credit through the CTE Transitions Credit by Examination.

In 2020-21, 1,698 enrollments in CTE Transitions CBE-eligible courses received college credit, for a total of 4,775 college units (up from 2019-20, when 3,757.5 college units were earned by CTE Transitions students). The number of enrollments receiving credit in 2020-21 increased (257 more enrollments receiving credit, or +18%) while the total number of enrollments decreased slightly (-59, or -1%). Further, 84% of grade-eligible enrollments received credit in 2020-21, up from in 2019-20 (74%). It is likely that students' return to SDUSD school sites and increased access to counselors⁶ contributed to this increase.

Table 7. Enrollments, Enrollments which received Credit, and Credit Received Rate

	2016-17	2017-18	2018-19	2019-20	2020-21	Average 18-19 to 20-21
Total Enrollments	3,446	4,174	3,178	5,587	5,528	4,764
Grade Eligible Enrollments	2,362	3,112	2,353	1,941	2,030	2,108
Enrollments which received Credit	1,110	1,891	1,754	1,441	1,698	1,631
Credit Received Rate, out of total	32%	45%	55%	26%	31%	34%
Credit Received Rate, out of eligible	47%	61%	75%	74%	84%	77%

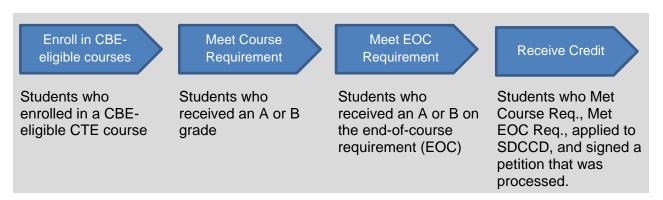
Figure 9. Five-year trend, headcount and college credit



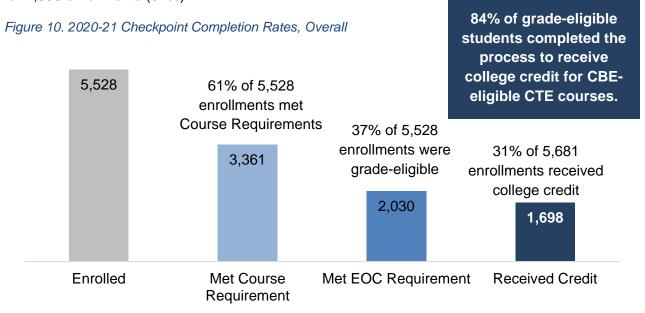
⁶ In Spring 2020, SDUSD instruction was delivered online in response to the COVID-19 Pandemic. SDUSD students returned to school sites in the 2020-21 academic year, and were therefore in closer proximity to counselors on a regular basis.

CTE Transitions Checkpoints

The four checkpoints to receive credit are **Enroll**, **Meet Course Requirement** (**Met Course Req.**), **Meet End of Course Requirement** (**Met EOC Req.**), and **Receive Credit**. This section examines student progress towards receiving credit, and identifies groups disproportionately impacted in achieving that outcome.



In 2020-21, there were 5,528 enrollments in CTE Transitions CBE-eligible courses. For 3,361 of those enrollments (61%), students received an A or B in the course. For 2,030 enrollments (37%), students received an A or B both in the course and on the end-of-course (EOC) requirement – these students were **grade-eligible** to receive college credit. Finally, college credit was awarded for 1,698 enrollments (31%).



In 2020-21, for every 10 students who enrolled in a CBE-eligible CTE course:

- 6 received an A or B in the course
- almost 4 received an A or B on the end-of-course requirement
- 3 received college credit

Compared to 2019-20, lower proportions of students met course requirements in 2020-21. It is likely that the transition of high school coursework to the online modality in the 2020-21 in response to the COVID-19 Pandemic impacted this metric. On the other hand, a higher proportion of students received college credit (2019-20: 26%; 2020-21: 31%).

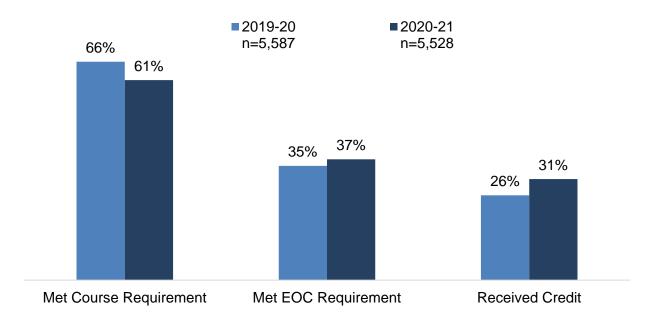


Figure 11. 2020-21 Checkpoint Data compared to 2019-20, % of Total Enrollments

Grade-eligible students who did not receive credit

High school students in CTE courses must meet grade requirements in a series of high school courses and an end-of-course requirement to be **grade-eligible** for college credit. These students must still complete two key logistical steps to receive college credit for their high school coursework: complete an application to SDCCD, and sign a petition for college credit (parents must also sign the petition for students under 18).

Data first available in 2020-21 shows the step between becoming grade-eligible and receiving credit that students completed or did not complete. 332 grade-eligible students did not receive college credit in 2020-21, or 16% of all grade-eligible students. This was a significant improvement from 2019-20, when 26% of grade-eligible students did not receive credit, largely due to the midsemester shift to online instruction in Spring 2020.

The majority (62%, or 207 students) did not complete an application for SDCCD. An additional 30% (101 students) did not submit a petition for credit. 10 students' petitions were pending submission to SDCCD as of the production of this report (November, 2021), and 13 students made errors while completing their petition such as entering a student ID or birthdate incorrectly.

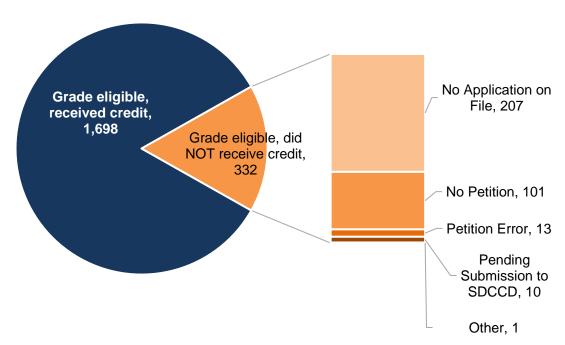


Figure 12. 2020-21 Credit Process Outcomes for Grade-eligible students

Grade-eligible students who did not receive credit, Ethnicity

There were notable differences in the proportion of students who were grade eligible but did not receive credit (GENC) by ethnicity. Of the 332 grade-eligible enrollments that did not receive credit in 2020-21, more than half were by Latinx students (55%), a significantly higher number than the next closest group (White students with 13%).

Table 8 shows the percent of all grade-eligible enrollments that did not receive credit, by ethnicity. In this comparison, a quarter of enrollments by Latinx students were grade eligible but did not receive credit, followed by 20% of enrollments by African American students.

African American and Latinx students accounted for 61% of enrollments that were grade-eligible but did not receive credit.

Table 8. Grade-eligible No credit enrollments, by Ethnicity

Ethnicity	GENC	Total Grade Eligible Enrollments	% GENC of Grade Eligible	Cumulative % of All GENC
Latinx	183	718	25%	55%
African American	20	100	20%	61%
Multiple Ethnicities	29	186	16%	70%
Asian	34	266	13%	80%
Filipino	23	196	12%	87%
White	43	552	8%	100%
Native American	0	4		
Pacific Islander	0	8		
Unknown	0	0		
Total	332	2,030	16%	

Grade-eligible students who did not receive credit, High School

There were also notable differences across high schools in the numbers of grade-eligible enrollments that did not receive credit (GENC). Table 9 shows the high schools sorted by the highest percentage of grade-eligible students who did not receive credit out of all grade-eligible students.

Twain High had the highest percent of grade-eligible enrollments that did not receive credit (39%), as well as the largest number (72 students, or 22% of all GENC enrollments). The next highest percentage schools were Hoover, Morse, and Lincoln (37%, 34%, and 25%, respectively). Schools with the lowest percentages of grade-eligible students who did not receive credit include La Jolla, Point Loma, and Scripps Ranch (2%, 6%, and 6%, respectively).

Twain, Hoover, Morse, Lincoln, and Garfield accounted for just over half (51%) of all gradeeligible enrollments that did not receive credit.

Table 9. Grade-eligible No credit enrollments, by High School

High School	GENC	Total Grade Eligible Enrollments	% GENC of Grade- Eligible	Cumulative % GENC
Twain High	72	186	39%	22%
Hoover High	46	124	37%	36%
Morse High	26	77	34%	43%
Lincoln High	14	57	25%	48%
Garfield High	12	53	23%	51%
Clairemont High	11	50	22%	55%
Kearny High School	22	107	21%	61%
Madison High	6	32	19%	63%
SDHS	13	72	18%	67%
Mission Bay High	8	64	13%	69%
Canyon Hills High	9	74	12%	72%
Mira Mesa High	20	177	11%	78%
San Diego SCPA	18	182	10%	83%
Henry High	22	237	9%	90%
University City High	12	139	9%	94%
Scripps Ranch High	17	270	6%	99%
Point Loma High	3	52	6%	100%
La Jolla High	1	54	2%	100%
Crawford High	0	0		
East Village	0	19		
Mt. Everest Academy	0	4		
Total	332	2,030		

Credit Completion and Completion Rates by High School

As in 2019-20, Scripps Ranch High saw the most enrollments awarded college credit (253), followed by Patrick Henry High (215). San Diego School of Creative and Performing Arts (SDSCPA) had the third-most enrollments awarded credit (164), followed by Mira Mesa High School (157). SDSCPA and Mira Mesa both saw the number of enrollments which received credit more than triple compared to 2019-20; at Mira Mesa, it appears that the site has largely recovered from a dramatic COVID-19 impact.

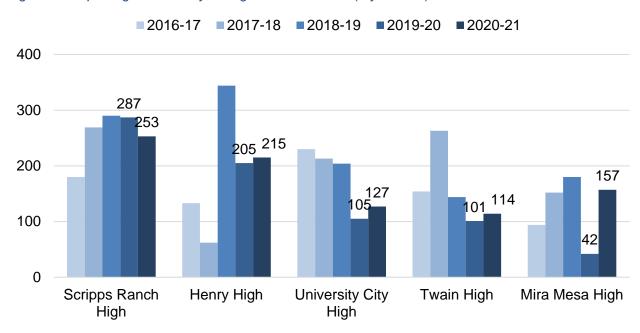


Figure 13. Top 5 High Schools by College Credit Awarded (5-year total)

In 2020-21, more than 90% of grade-eligible students at La Jolla, Point Loma, Scripps Ranch, University City, Henry, and SDSCPA earned college credit, indicating that students at these high schools are very well-positioned to navigate the process to apply to SDCCD and petition for credit, and that these schools implement robust processes to support students and parents through this process.

Grade-eligible students at Morse, Hoover, and Twain high schools earned credit at the lowest rates in the district (66%, 63%, and 61%, respectively), indicating that students at these school sites require additional or strengthened supports to complete the process to earn college credit for academic coursework they have already completed. Further, grade-eligible students at Clairemont and Morse earned college credit at rates lower than in 2019-20 (-6% and -1%) – these were the only two sites at which rates of receiving credit among grade-eligible students decreased. See Table 10 on the next page for full detail of credit-earning by school site.

Table 10. Percent of Grade Eligible Enrollments that Earned College Credit, by High School

	2019-20					202	0-21		D:((: 0/
	Enrolled	Grade Eligible	Received Credit	% Received Credit	Enrolled	Grade Eligible	Received Credit	% Received Credit	Diff. in % Received Credit
La Jolla	144	54	45	83%	143	54	53	98%	15%
Point Loma	267	75	70	93%	346	52	49	94%	1%
Scripps Ranch	594	322	287	89%	458	270	253	94%	5%
University City	340	121	105	87%	246	139	127	91%	5%
Henry	541	243	205	84%	387	237	215	91%	6%
San Diego SCPA	124	65	46	71%	269	182	164	90%	19%
Mira Mesa	372	56	42	75%	549	177	157	89%	14%
Canyon Hills	300	93	61	66%	274	74	65	88%	22%
Mission Bay	269	56	46	82%	241	64	56	88%	5%
SDHS	449	86	45	52%	327	72	59	82%	30%
Madison	108	22	17	77%	55	32	26	81%	4%
Kearny	519	96	73	76%	416	107	85	79%	3%
Clairemont	285	91	76	84%	238	50	39	78%	-6%
Garfield	146	47	33	70%	166	53	41	77%	7%
Lincoln	148	92	46	50%	111	57	43	75%	25%
Morse	272	120	81	68%	342	77	51	66%	-1%
Hoover	314	128	57	45%	483	124	78	63%	18%
Twain	324	167	101	60%	391	186	114	61%	1%
Crawford	57		0		41		0		
Mt. Everest	14	7	5	71%	10	4	4	100%	29%

Note 1. % Received Credit is out of **grade-eligible** enrollments.

Note 2. Schools sorted in descending order of % Received Credit in 2020-21. Mt. Everest included at the bottom of the table due to low enrollment volume.

Note 3. The size of blue bars in the "Enrolled" column refers to the number of total enrollments in CTE CBE-articulated courses at each high school in each academic year.

Credit Completion and Completion Rates by Subject of College Course

Engineering accounted for the most enrollments for which college credit was awarded in 2020-21 (434). Child Development and Photo accounted for the second- and third-most (204 and 168).

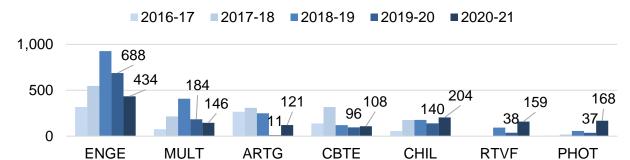


Figure 14. Top 5 Subjects by Awarded College Credit (5-year total)

All grade-eligible enrollments in Biology and Geographic Information Science received college credit. Grade-eligible Nutrition enrollments also received credit at a high rate (96%). Subjects with the lowest rates of grade-eligible enrollments were Culinary Arts/Culinary Management (67%), Computer Business Technology (61%), and Fire Protection (57%).

In some cases, credit-earning trends by subject are likely impacted by site-specific trends. For example, Computer Business Technology was exclusively offered at Twain High School and was the only CBE course offered there. On the other hand, Nutrition was offered at Hoover and Morse, which had low overall rates. See the Enrollment Pattern Explorer dashboard for more detail on rates of earning credit by subject and high school. See Table 12 (next page) for more detail.

Table 11. Subjects with highest and Lowest Rates of Receiving Credit in 2020-21							
	BIO	L	GIS	G			
	School	Enrollments	School	Enrollments			
	Canyon Hills	43	Hoover	6			
	Clairemont	60	Kearny	47			
Subjects	Crawford	41	NU ⁻	TR			
with Highest	Kearny	53	School	Enrollments			
Rates	La Jolla	46	Hoover	209			
	Mira Mesa	112	Mira Mesa	143			
	Point Loma	31	Morse	137			
	SDHS	54	Mt. Everest	8			
	University City	66	SDHS	56			
	CAC	M	СВТЕ				
	School	Enrollments	School	Enrollments			
Subjects	Garfield	82	Twain	364			
with Lowest Rates	Hoover	127	FIF	PT			
	Mira Mesa	47	School	Enrollments			
	Morse	58	Lincoln	51			
	SDHS	54					

Table 11. Subjects with Highest and Lowest Rates of Receiving Credit in 2020-21

Table 12. Percent of Grade Eligible Enrollments that Earned College Credit, by Subject

		2019	9-20			2020-21				
	Enrolled	Grade Eligible	Received Credit	% Received Credit	Enrolled	Grade Eligible	Received Credit	% Received Credit	Diff. in % Received Credit	
BIOL	397	102	95	93%	506	123	123	100%	7%	
GISG	83	23	15	65%	53	18	18	100%	35%	
NUTR	0	0	0	-	560	48	46	96%		
ARTG	705	17	11	65%	769	130	121	93%	28%	
ENGE	1,894	787	688	87%	1,185	467	434	93%	6%	
EDUC	129	74	62	84%	131	60	54	90%	6%	
CHIL	379	186	140	75%	361	230	204	89%	13%	
PHOT	114	51	37	73%	348	199	168	84%		
MULT	584	283	184	65%	308	189	146	77%	12%	
RTVF	371	62	41	66%	467	209	158	76%	9%	
CACM	438	163	67	41%	368	151	101	67%	26%	
CBTE	282	156	96	62%	364	176	108	61%	0%	
FIPT	46	37	5	14%	51	30	17	57%	43%	
MACT	165				57					

Note 1. % Received Credit is out of Grade Eligible enrollments.

Note 3. The size of blue bars in the "Enrolled" column refers to the number of total enrollments in CTE CBE-articulated courses at each high school in each academic year.

Link to Dashboard

See this data disaggregated by high school, ethnicity, gender, special education status, and primary language in the Enrollment Pattern Explorer dashboard.

Note 2. Subjects sorted in descending order of % Received Credit in 2020-21.

A number of courses showed significantly lower rates of receiving credit among grade eligible students than the school site's overall average. Grade-eligible students in these courses (orange-highlighted rows in Table 13) received college credit at less than 80% the average for that school site.

This evidence suggests that business process support is needed for students in high school courses articulated to the college courses highlighted in orange below. 84 students in these subjects were grade-eligible to receive college credit, but did not complete the process.

No or few students were grade-eligible in a number of other courses, as well. In cases where some students completed course requirements, this may be due to unavailability of the end-of-course requirement, although several of these courses also saw very low rates of students completing the high school courses with A or B letter grades (e.g. Nutrition at Hoover, Digital Media at Point Loma, Biology at Crawford).

Table 13. Subjects in which grade-eligible students need support to complete petition process

School	Subject of College Course	Enrolled	Met Course Req.	Grade Eligible	Received Credit	% Received Credit of Enrolled	% Received Credit of Grade-Eligible
Mira Mesa	PHOT	68	49	49	34	50%	69%
	GISG	6	3	0	0	0%	
Hoover	NUTR	209	95	0	0	0%	
	RTVF	106	43	42	18	17%	43%
Kearny	ARTG	80	28	0	0	0%	
Reality	MACT	57	24	0	0	0%	
Honny	PHOT	7	6	3	2	29%	67%
Henry	RTVF	64	43	32	21	33%	66%
Point Loma	ARTG	144	87	0	0	0%	
Point Lonia	PHOT	86	62	0	0	0%	
Moroo	CACM	58	28	28	12	21%	43%
Morse	NUTR	137	88	0	0	0%	
SDHS	CACM	54	16	14	9	17%	64%
Canyon Hills	BIOL	43	24	0	0	0%	
Lincoln	FIPT	51	34	30	17	33%	57%
Crawford	BIOL	41	8	0	0	0%	
Mt. Everest	MULT	2	1	0	0	0%	

In addition to the courses in Table 13 in which students may need business process support, there were a number of courses in which low numbers of students earned college credit **out of those enrolled**. Table 14 below shows courses in which most or all grade-eligible students earned credit, but **low rates of those enrolled were able to become grade-eligible**. This data has a number of implications:

- Enrolled students in these courses may not intend to complete both high school components of the course and/or the end-ofcourse requirement. These students may benefit from additional outreach efforts about the value of early college credit opportunities in CTE pathways.
- Enrolled students may not be aware of the requirements necessary to receive college credit.
- Enrolled students may benefit from additional academic support to complete course requirements and the end-of-course requirement.

Table 14. Schools with low rates of receiving college credit out of total enrolled

School	Subject of College Course	Enrolled	Met Course Req.	Grade Eligible	Received Credit	% Received Credit of Enrolled	% Received Credit of Grade- Eligible
Mira Mesa	ARTG	94	55	4	4	4%	100%
IVIII a IVIESa	ENGN	64	44	12	11	17%	92%
Scripps Ranch	ARTG	160	126	55	52	33%	95%
Kearny	ENGN	81	55	12	12	15%	100%
Twain	CHIL	27	11	10	6	22%	60%
Henry	ARTG	60	45	17	16	27%	94%
Point Loma	BIOL	31	20	1	1	3%	100%
SDHS	BIOL	54	12	1	1	2%	100%
SDHS	NUTR	56	9	5	4	7%	80%
San Diego SCPA	ARTG	57	57	12	10	18%	83%
Clairemont	BIOL	60	15	6	6	10%	100%
Cialiemoni	RTVF	71	61	1	1	1%	100%
Garfield	CACM	82	21	19	14	17%	74%
La Jolla	ARTG	91	67	21	20	22%	95%

Credit Completion and Completion Rates by Ethnicity

In 2020-21, there were notable differences in program completion by ethnicity. While Latinx students accounted for 43% all enrollments, they were just 32% of those who received credit.

Representation of Latinx students among credit earners was slightly higher in 2020-21 (32%) than in 2019-20 (30%). Nonetheless, the gap in representation between enrollment and earning credit for Latinx students was significant in 2020-21 (-11%), and similar to the gap in 2019-20 (-12%).

See Table 19 in the appendix for counts of students who reached each checkpoint, by ethnicity. Figure 15 below shows overall representation in each of the four checkpoints.

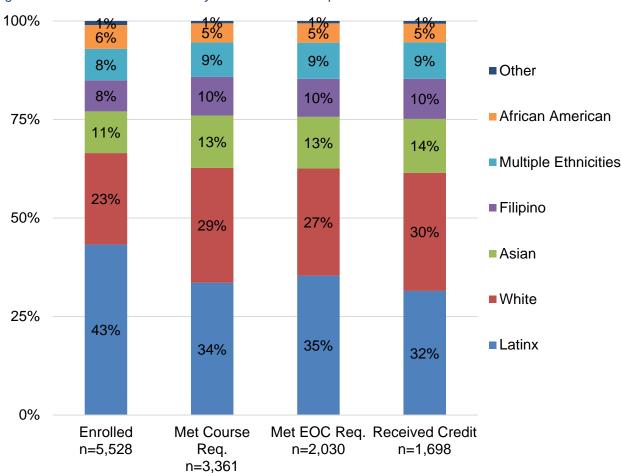


Figure 15. 2020-21 SDUSD Ethnicity in CTE CBE Checkpoints

Overall, 61% of student enrollments received an A or B in the course; 37% met the end-of-course requirement (EOC); 31% received credit. Asian, White, and Filipino students received credit at higher rates (40%), and African American and Latinx students received credit at lower rates (24% and 22%, respectively).

The gap in the rates at which Latinx and African American students received credit in 2020-21 decreased significantly from 2019-20. In 2019-20, African American and Latinx students received credit at rates 23% and 22% lower than Asian students. In 2020-12, those gaps decreased to 16% and 17%. While gaps in received credit rates improved since last year, gaps remain in other places.

In 2020-21, Latinx and African American students met course requirements at rates nearly 30% lower than Asian, White, and Filipino students, and earned credit at rates 16% to 17% lower. These gaps were slightly smaller in 2020-21 than in 2019-20, but remain significant. See Table 15 for 2019-20 and 2020-21 progress through checkpoint data.

See **Figure 16 in the appendix** for the percent by ethnicity of enrollees in the largest ethnicity groups who achieved each checkpoint towards receiving credit, and **Table 19 for counts**.

Table 15. Gaps in Reaching Checkpoints, by Checkpoint and Ethnicity

	Group	Met Cou	Met Course Req.		C Req.	Received Credit	
	Group	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21
	Asian	86%	76%	48%	46%	40%	40%
% of Each	White	82%	76%	40%	43%	34%	40%
Group	Filipino	79%	76%	41%	45%	30%	40%
Achieving	African American	55%	49%	27%	30%	17%	24%
Checkpoints	Latinx	53%	47%	29%	30%	18%	22%
	Reference (Max)	86%	76%	48%	46%	40%	40%
	Asian	0%	0%	0%	0%	0%	0%
Gap Between	White	-4%	0%	-8%	-3%	-6%	0%
Each Group and Reference	Filipino	-7%	0%	-7%	-1%	-9%	0%
Group	African American	-31%	-28%	-21%	-16%	-23%	-16%
	Latinx	-33%	-29%	-19%	-16 <mark>%</mark>	-22%	-17%

Credit Completion and Completion Rates by Other Demographic Factors

This report also examined the relationship between receiving credit and other demographic factors: gender, special education status, and language group⁷. **Disproportionate impact (DI)** was found on students who were male, in special education, and among students whose home language was Spanish, Somali, and Lao.

DI on male students was moderate: they were successful in receiving credit at a rate 8% lower than female students (27% for male students, 35% for female students). If 208 more male students received credit (in addition to the 843 who did), their success rate would not represent DI. The gap between the rates at which male students earned credit and female students earned credit increased slightly from 2019-20, from 6% to 8%.

DI on special education students was significant, and the highest of all groups examined: they were successful in receiving credit at a rate 17% lower than non-special education students. If 80 more special education students received credit (in addition to the 87 who did), their success rate would not represent DI. It should be noted that, while a higher percent of Special Education students received credit in 2020-21 than in 2019-20 (+3%), the gap between Special Education and non-Special Education students in 2020-21 (-18%) was actually larger than in 2019-20 (-15%).

Credit Completion Rates and Home Language

There is strong evidence that Spanish-language support to complete the credit petition process (apply to SDCCD, sign the petition form) would address barriers for students with a homelanguage of Spanish: in 2020-21, students with a home language of Spanish accounted for 29% of all students, but 40% of grade-eligible students who did not receive credit.

Of the 1,583 students with a reported home language of Spanish, 304 received credit, or 19%. This was 16% lower than students with a home language of English. Other DI language groups were the 25 Somali-speaking students (5 of whom received credit, or 20%) and the 36 Laospeaking students (6 of whom received credit, or 17%).

Table 16	2020 21	DI Groups	by Condor	Special Education	and Language
Table To.	2020-21	DI GIOUDS	ov Genaer.	. Special Equication	1. and Landuade

Disproportionately Impacted Group	% Received Credit	Minimum Equity Number
Male students	27%	208
Special Education students	15%	80
Home language of Spanish	19%	222
Home language of Somali	20%	3
Home language of Lao	17%	5
Overall	31%	

⁷ Language data reflects the language indicated as the main language spoken at home. Some reported languages were grouped, such as Mandarin and Cantonese into "Chinese." See Figure 22 for more detail on language groups.

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High School Enrollment and Outcomes Summary

Some high schools have seen growth both in enrollment and in the rate of grade-eligible students earning credit; others have encountered challenges in one or both of these areas. And while the rate of grade-eligible students receiving credit has generally increased, there are many schools that see relatively low rates of students becoming grade-eligible for college credit.

Table 17 below summarizes enrollment trends (increasing or decreasing) and outcome trends across high school sites. Red flags in the "Received Credit" columns indicate sites at which students earned credit at rates less than 80% of the reference site (SDSCPA, in blue).

Opportunity High Schools – Enrollment: Henry, Lincoln, Madison, and University City saw lower enrollment in 2020-21 than in the prior year and compared to three years ago.

Opportunity High Schools – Received Credit: Students at Hoover, Morse, and Twain earned credit at rates less than 80% of students at SDSCPA. This was true both for *all enrollments* and *grade-eligible enrollments*. Further, grade-eligible student at these sites earned credit at the lowest rates of all 20 schools (61% to 66% in 2020-21). See Tables 9 and 10 for more detail on rates of earning credit by site.

Table 17. Enrollment and Outcomes Trend Summary

	Enrollme	ent Trend	Received Credit in 2020-21				
School	2 V2 2"	4 Voor	Out of	Out of	Compared		
	3-Year	1-Year	Total	Eligible	to 19-20		
Canyon Hills	1	•	24 %	88%	•		
Clairemont	1	•	1 6%	78 %	•		
Crawford	1	•					
East Village			68%	100%			
Garfield	1	1	25%	77 %	•		
Henry	•	•	56%	91%	•		
Hoover	1	1	1 6%	63 %	•		
Kearny	1	•	20%	79%	•		
La Jolla	1	•	37 %	98%	•		
Lincoln	•	•	39 %	75 %	•		
Madison	•	•	47 %	81%	•		
Mira Mesa	1	1	29%	89%	•		
Mission Bay	1	•	23%	88%	•		
Morse	1	1	15%	66%	~		
Mt. Everest	1	•	40 %	100%	•		
Point Loma	1	1	1 4%	94%	•		
San Diego SCPA	1	1	61%	90%	•		
Scripps Ranch	1	•	55 %	94%			
SDHS	1	•	18 %	82%	•		
Twain	Ŷ	Ŷ	29 %	61%	•		
University City	•	•	52 %	91%	1		

Note 1. In "Received Credit" columns, red flags indicate sites at which students received credit at a rate less than 80% of the reference site (SDSCPA). Out of Total 80% threshold = 49%. Out of Eligible 80% threshold = 72%.

Note 2. The "Compared to 19-20" column compares the rate of **grade eligible students** who received credit in 2020-21 to the prior year.

CTE Transitions students who enroll at SDCCD

One of the primary benefits of the CTE Transitions program is that students get an early start on their college careers: the program awarded over 4,775 college units in 2020-21. This section examines students who received college credit through CTE Transitions and then enrolled at City, Mesa, or Miramar Colleges.

Four cohorts of students were tracked for enrollment at SDCCD after they received college credit through CTE Transitions: high school graduates in 2017, 2018, 2019, and 2020. These cohorts include students who received college credit between 2015-16 and 2019-20.

Students in these cohorts were tracked through the 2020-21 academic year (the most recent year for which data was available) for enrollments⁸ at City, Mesa, or Miramar College. 2017 graduates were tracked through four full academic years, 2018 graduates for three years, 2019 graduates for two years, and 2020 graduates for one academic year.

Of the 3,518 students in the four cohorts, 46% enrolled after high school graduation at City, Mesa, or Miramar College. The SDCCD enrollment rate for students who graduated high school in 2017 were the highest (53%), partially because those students had a longer window in which to enroll at one of the colleges.

The SDCCD enrollment rate for the most recent cohort (Class of 2020: 36%) is comparable to the rate for CCAP graduates in 2020 and then enrolled at SDCCD the following fall (30%).

Graduation Year	Number of Students	Number Enrolled at SDCCD	% Enrolled at SDCCD
2017	399	211	53%
2018	901	432	48%
2019	1,099	553	50%
2020	1,119	405	36%
Total	3,518	1,601	46%

Background Context

32% of all SDUSD graduates over the last five years enrolled at SDCCD in the year following high school graduation.

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⁸ Includes valid enrollments at the end-of-term in Fall, Spring, Intersession, and Summer terms. Excludes cancelled courses and tutoring.

Research Questions, Answered

1) In which CBE-eligible CTE courses do students enroll the most? At which school sites do the majority of enrollments occur?

21% of the 5,528 enrollments in 2020-21 were in **Engineering** courses. **Graphic Design** was the second largest subject in 2020-21, followed by **Nutrition**. The high number of enrollments in Nutrition is remarkable as this is the first year in which a CBE opportunity for that college course was available.

Mira Mesa High School had the most enrollments in 2020-21, a 48% increase from the prior year. This increase was partially due to the addition of Nutrition (153 enrollments at Mira Mesa in 2020-21). **Scripps Ranch** and **Kearny High Schools** had the second-largest numbers of enrollments in 2020-21.

- 2) What is the composition of students who are enrolling in CBE-eligible courses?
 42% of CTE Transitions students were Latinx, 24% were White, 11% were Asian, African Filipino students were 8%, and African American Students were 6%.
 57% of participants were male in 2020-21, down from a peak of 60% in 2018-19.
- 3) How many students demonstrate competency in CBE-eligible courses? 1,698 enrollments received credit in 2020-21, or 31% of all enrollments; students earned more than 3,700 college units that year. 434 of these enrollments were in engineering, 204 were in Child Development, and 168 were in Photography. This is 84% of students who were grade-eligible to receive credit.
- 4) Do students who receive credit by exam from local school districts end up enrolling at SDCCD?

Of the 3,518 students in the four cohorts, 46% enrolled after high school graduation at City, Mesa, or Miramar College. The SDCCD enrollment rate for students who graduated high school in 2017 were the highest (53%), partially because those students had a longer window in which to enroll at one of the colleges.

The SDCCD enrollment rate for the most recent cohort (Class of 2020: 36%) is comparable to the rate for CCAP seniors who graduated in 2020 and then enrolled at SDCCD the following fall (30%).

Focus on Equity

5) What opportunities exist to address equity challenges (a) within the program pipeline and/or (b) across the program's implementation in the San Diego region?

Opportunities in Access

Disproportionately low rates of participation by African American and Latinx students: A number of sites showed low rates of participation for these two groups compared to the population of each site. Of these, the sites with the largest African American and Latinx student populations are listed below (see Table 3 on page 14).

- African American students participated in CTE Transitions courses at disproportionately lower rates at Patrick Henry (150 students at high school, 10 of whom participated in CTE Transitions); Mira Mesa (89 students at high school, 15 of whom participated); and Mission Bay (57 students at high school, 7 of whom participated).
- Latinx students participated in CTE Transitions courses at disproportionately lower rates at La Jolla High (333 Latinx students at high school, 22 of whom participated) and University City High (669 Latinx students at high school, 51 of whom participated).

Female under-representation in Engineering: Under-representation of female students in one of the largest CTE subjects, Engineering, remains a salient trend (female students accounted about one quarter of Engineering enrollments in each of the last five years) that reflects challenges in increasing female representation in high-paying STEM fields.

Opportunities to support students through the process to receive credit

The primary reason that grade-eligible students did not receive college credit was **not completing an application with SDCCD** (207 out of 332 grade-eligible students who did not receive credit, or 62%). The remaining instances of grade-eligible students not receiving college credit were due to not submitting a petition (101 or 30%).

Language-based support for receiving credit: There is evidence to suggest that Spanish-language support in the process to receive credit is needed: while students with a home language of Spanish accounted for 29% of all CTE Transitions participants in 2020-21, they accounted for 40% of those who were grade-eligible but did not receive credit (132 students).

Site-based support for receiving credit: Less than 70% of grade-eligible students at Morse, Hoover, and Twain received college credit. At Morse, the rate of grade-eligible students receiving credit was 1% lower than in 2019-20, a year where this process was heavily impacted by COVID-19. At Twain, it was 1% higher. This support is particularly important at Hoover and Morse as those sites saw a large increase in the number of students enrolling in CBE-eligible CTE courses compared to 2019-20 (+54% and +26%, respectively). See Table 11 for the courses in which the rates of grade-eligible students at these sites were particularly low.

Additionally, it should also be noted that a lower rate of grade-eligible students at Clairemont received college credit (-6%) in 2020-21 than in 2019-20.

Next Steps

Explore opportunities to extend CBE agreements to all high school sites that already offer sufficient high school coursework in that pathway to fulfill CBE articulation criteria, or are close to offering sufficient coursework.

Agreements

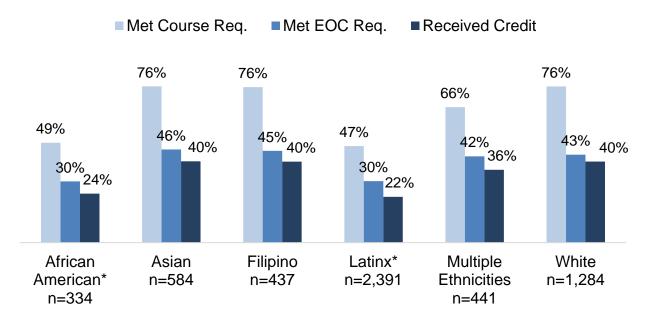
- Ensure agreements are connected to college courses that lead to certificate and degrees; when possible, develop agreements that lead to high wage and high demand careers.
- Continuing to strategically develop agreements for high school courses with high enrollment, particularly in pathways or schools that have less opportunities for early college credit.
- Continue to strengthen outreach to parents and students to complete the SDCCD application, clarifying and simplifying language when possible. Consider providing Spanish-language materials.
- Leverage existing services to communicate with Special Education students regarding applying to SDCCD and signing petition forms.

Outreach and student support

- Explore women-in-STEM messaging for Engineering classes.
- As enrollments in CBE-articulated courses expand at sites like Hoover and Morse, ensure students in courses aligned to college credit opportunities are aware of the benefits of early college credit and have the necessary resources to navigate the process to petition for credit.
 - o Hoover: Nutrition; Radio, Television, Film
 - o Morse: Culinary Arts/Culinary Management
- Examine academic support for Latinx and African American students in CTE Transitions courses: these groups completed course requirements at rates 30% lower than the highest group over the last two years.

Appendix

Figure 16. 2020-21 Participant Progress through Checkpoints, by Ethnicity



Note. Groups that were disproportionately impacted (DI) in received credit indicated with an *. Not shown, Pacific Islander students were also DI.

Table 19. 2020-21 Checkpoint Progress by Ethnicity

	Enrolled	Met Course Req.	Met EOC Req.	Received Credit	Eligible, No Credit (Met EOC Req. minus Received Credit)
Latinx*	2,391	1,128	718	535	183
White	1,284	980	552	509	43
Asian	584	446	266	232	34
Multiple Ethnicities	441	292	186	157	29
Filipino	437	332	196	173	23
African American*	334	163	100	80	20
Pacific Islander*	33	14	8	8	0
Unknown*	14	0	0	0	0
Native American	10	6	4	4	0
Total	5,528	3,361	2,030	1,698	332

Note. Groups which were disproportionately impacted in receiving credit indicated with an *.

Figure 17. 2020-21 Checkpoint Completion Rates, by Gender

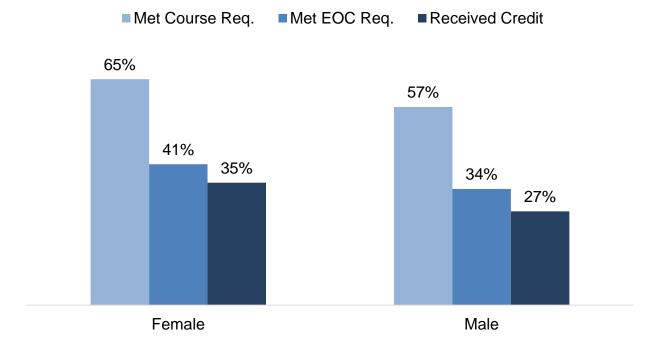


Table 20. 2020-21 Checkpoint Completion Counts, by Gender

	Enrolled	Met Course Req.	Met EOC Req.	Received Credit
Female	2,411	1,575	982	853
Male	3,111	1,782	1,045	843
Unreported	6	4	3	2
Total	5,528	3,361	2,030	1,698

Table 21. 2019-20 Checkpoint Completion Rates, by Gender

	Enrolled	Met Course Req.	Met EOC Req.	Received Credit
Female	2,210	71%	39%	30%
Male	3,369	64%	32%	23%
Unreported	8	88%	63%	25%
Total	5,579	66%	35%	26%

Table 22. 2020-21 Checkpoint Completion Rates, by Special Education Status

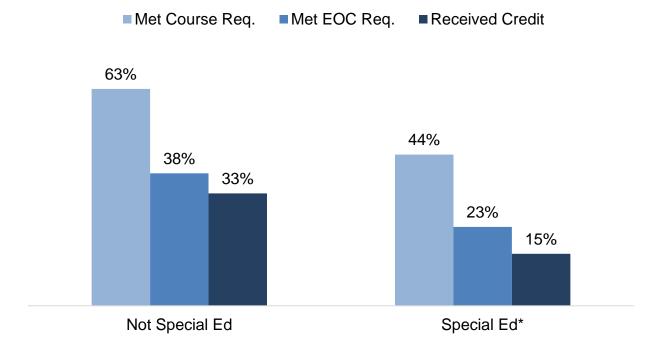


Table 23. 2020-21 Checkpoint Completion Counts, by Special Education Status

	Enrolled	Met Course Req.	Met EOC Req.	Received Credit
Not Special Ed	4,950	3,108	1,898	1,611
Special Ed	578	253	132	87
Total	5,528	3,361	2,030	1,698

Table 24.2019-20 Checkpoint Completion Rates, by Special Education Status

	Enrolled	Met Course Req.	Met EOC Req.	Received Credit
Not Special Ed	5,223	68%	36%	27%
Special Ed	364	42%	19%	12%
Total	5,587	66%	35%	26%

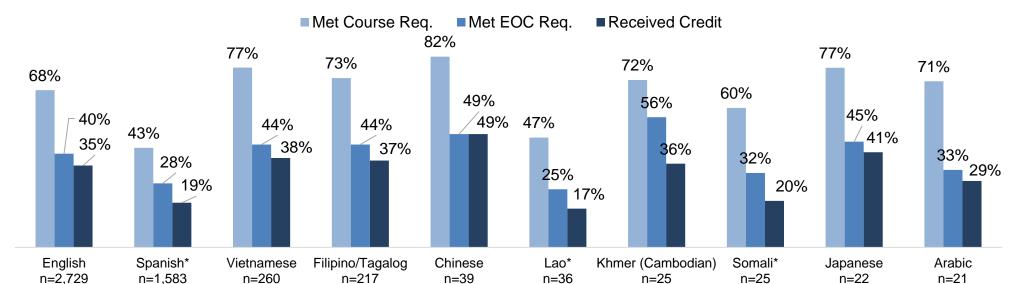


Figure 18. 2020-21 Checkpoint Completion Rates, by Language

Table 25. 2020-21 Checkpoint Completion Counts, by Special Education Status

	Enrolled	Met Course Req.	Met EOC Req.	Received Credit
English	2,729	1,845	1,100	961
Spanish	1,583	678	436	304
Vietnamese	260	201	115	100
Filipino/Tagalog	217	158	96	81
Chinese	39	32	19	19
Lao	36	17	9	6
Khmer (Cambodian)	25	18	14	9
Somali	25	15	8	5
Japanese	22	17	10	9
Arabic	21	15	7	6
Total Top 10 Languages	4,957	2,996	1,814	1,500