CTE Transitions Program:
A Jumpstart for High School Students through Credit by Exam
2015-16 to 2019-20

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SDCCD Office of Institutional Research and Planning

CTE Transitions Report, 2015-16 to 2019-20

This report examines the San Diego Community College District's Career and Technical Education (CTE) Transition Program. This program provides students in feeder 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.

3. **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.

Figure 1. 2019-20 Enrollments by Checkpoint

Enroll in CBE-eligible courses *5,302 enrollments*	**Met Course Requirement** *3,589 enrollments*	**Met EOC Requirement** *1,829 enrollments*	**Receive Credit** *1,051 enrollments*

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.

Figure 2. Subsequent Enrollment in SDCCD, all Cohorts

Receive Credit and graduate high school in 2017 (397 students), 2018 (892 students), or 2019 (897 students)	**Enroll at SDCCD** 3 cohorts: Grad 2017: 210 students Grad 2018: 334 students Grad 2019: 260 students	**Stay in pathway:** Grad 2017: 87 students Grad 2018: 126 students Grad 2019: 100 students
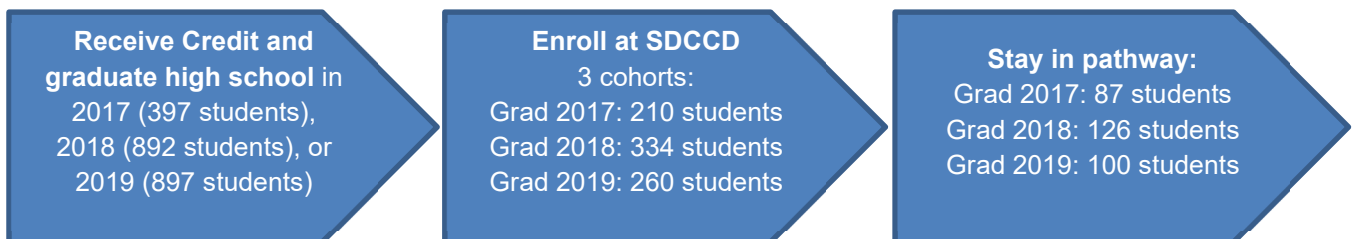
Grad Year	Possible Years in CTE Transitions
2017	2013-14 to 2016-17
2018	2014-15 to 2017-18
2019	2015-16 to 2018-19

Executive Summary

- **The CTE Transitions Program has grown over the last five years,** nearly doubling in the number of students served (+96% in headcount) and increasing the number of duplicated enrollments by 60%. Over those five years, enrollments increased until 2017-18, decreased 25% in 2018-19, then increased 68% to 5,302 in 2019-20. This pattern was mostly consistent across participating SDUSD high schools.

- **Engineering accounted for the largest number of enrollments in 2019-20 (1,880 of 5,302, or 35%).** This subject is highly male-dominated (75% of enrollments in 2019-20 were accounted for by male students).

- **Patrick Henry, Scripps Ranch,** and **Kearny High Schools** accounted for the largest numbers of enrollments over the last five years (2,168, 2,153, and 1,810 respectively). These schools also accounted for the largest numbers of enrollments in 2019-20 (500, 584, and 505, respectively).

- **1,051 enrollments received credit in 2019-20, or 20% of all enrollments**; students earned more than 2,700 college units that year. 2019-20 was the first year that saw a decrease in the percent of students eligible for credit who received it, likely due to COVID-19 disrupting school schedules and students' personal lives.

- **Groups that were disproportionately impacted in earning credit in the program in 2019-20 included students who were Latinx, African American, and special education, and English learners and students reclassified as fluent English proficient**.

- **778 students who completed academic requirements to receive credit did not complete the required paperwork (43% of those eligible to receive credit)**. This final checkpoint contributed to the disproportionate impact on the previously mentioned groups.

- **37% of students who earn credit through the CTE Transitions program end up enrolling at SDCCD.** The SDCCD enrollment rate for the 2019 cohort (29%) was comparable to the rate for CCAP seniors who graduated in 2019 and then enrolled at SDCCD the following Fall (30%). Across all three cohorts of CTE Transitions students tracked in this report, 14% of students who earned college credit enrolled in courses related to the high school CTE pathway in which they earned college credit.

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 across fifteen industry sectors. CTE pathways are "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.).

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 CTE Transitions Program, 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.

Colleges in the San Diego Community College District (SDCCD) partner with San Diego Unified School District high schools to identify courses that facilitate college-level mastery of a CTE subject area. Under faculty-led CTE Transitions credit by examination 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, transition from K-12 to college, and stay in their chosen pathway. It also seeks to identify ways that SDCCD can work together with partner high schools to widen the pipeline of students entering CTE pathways and address equity challenges within that pipeline. The next page lists the research questions embedded in this report.

Important notes regarding data

Data Sources: Data for academic years 2015-16 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. Data for 2019-20 was provided by SDUSD (for more detail, see below).

Better Data: Improved data collection and reporting efforts by SDUSD in the 2019-20 academic year 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 took and received the end-of-course requirement. These requirements vary by course, (test, portfolio, or both; performance-based assessments were planned for some courses but were unavailable in 2019-20 due to COVID-19).
4. Received Credit: Eligible students (both passed course and passed EOC requirement) who completed the required steps to receive college credit.

COVID-19 Impact: High school courses aligned to Digital Media (ARTG 125) and Machine Technology (MACT 140) use performance-based assessments for the end-of-course requirement. SDUSD's mid-semester transition to online instruction in response to COVID-19 meant these end-of-course requirements were unavailable during the Spring 2020 semester, which is why there were virtually no students[1] who received credit for these two courses in the 2019-20 academic year.

Research questions

1) In which CBE-eligible CTE courses do students enroll the most? Which school sites 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) 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?

5) How many students who receive credit by exam from local school districts end up enrolling at SDCCD? How many of these students end up enrolling in courses related to their high school CTE Pathway?

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[1] Two students received credit for ARTG in 2019-20.

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 3 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 3, the number of courses covered by CTE Transitions agreements has decreased from 32 in 2015-16 to 21 in 2019-20. 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.

As the number of courses covered by agreements has generally decreased, the number of students participating in the program and receiving credit through the program has generally increased, as detailed in the next section.

Figure 3. Count of SDUSD High School Courses connected to CTE Transitions CBE agreements

SDCCD Office of Institutional Research and Planning
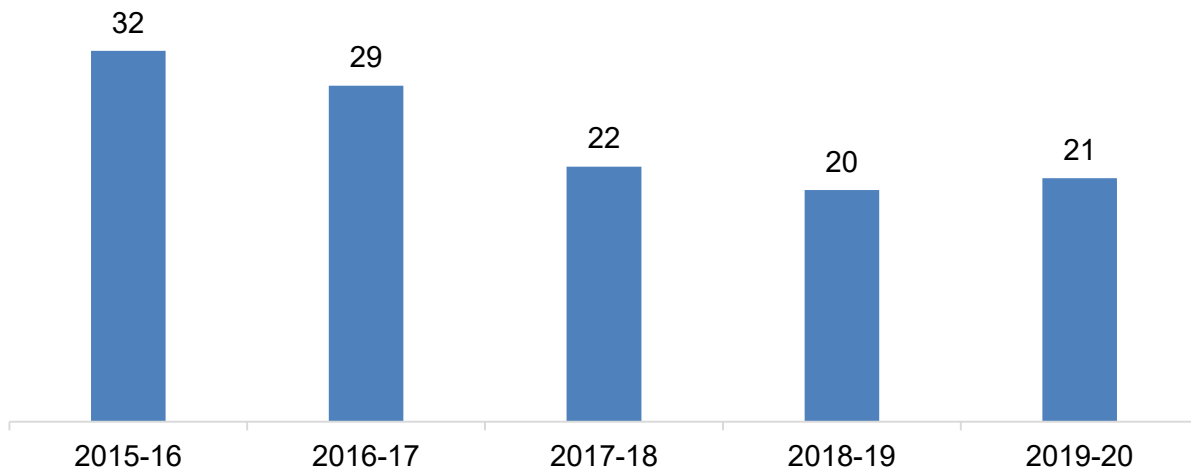
Participation in the CTE Transitions Program at SDUSD high schools

CTE Transitions Headcount Trends: Generally Increasing Headcount

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

From 2015-16 to 2019-20, the number of students participating in CBE Transitions nearly doubled, from 2,528 to 4,964. Participation in the program grew each year except in 2018-19, when there was a 25% decrease compared to the prior year. Enrollments ("seats") followed a similar pattern, although the number of students receiving credit in 2018-19 (1,754) was only 8% lower than in 2017-18 (1,891). For more detail about how many students received credit, see page 19.

On average, CTE Transitions students enroll in about 1 course per year. The average number of enrollments per student was slightly lower in 2019-20 (1.07) than in prior years (between 1.14 and 1.31).

Figure 4. Headcount in CTE Transitions, by Year

+96% Increase in headcount

2015-16	2016-17	2017-18	2018-19	2019-20
2,528	3,031	3,588	2,695	4,964

Demographics of CTE Transitions

Ethnicity: Of the 4,964 students who enrolled in a CTE Transitions CBE-eligible course in 2019-20, Latinx students were the largest group (2,057 students or 41% of the total). The next largest group was white students (1,332, 27%), followed by Asian students (673, 14%), African American students (410, 8%), and Filipino students (395, 8%).

Representation of Latinx students has grown over the last five years. From 2015-16 to 2017-18, this group comprised 34% of CTE Transitions students. In 2019-20, they were 41% of all CTE Transitions students. However, Latinx students are still under-represented in CTE Transitions compared to the SDUSD high school population[2]. In 2019-20, CTE Transitions participants were **less likely to be Latinx,** and **more likely to be White and Asian** than the SDUSD high school population**.**

Figure 5. CTE Transitions Student Ethnicity, 2019-20
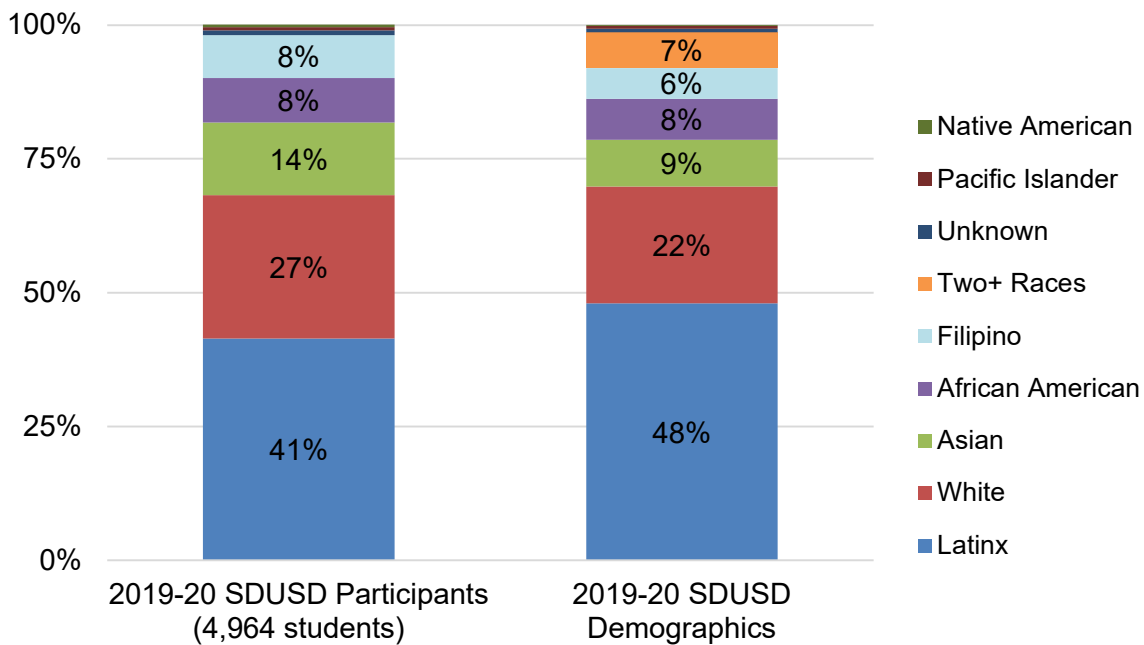
Gender: In 2019-20, CTE Transitions students were **more likely to be male** (61%) than female (39%). The over-representation of male students has increased over the last five years, up from 54% of all students in 2015-16.

See page 14 for more detail on gender representation by subject.

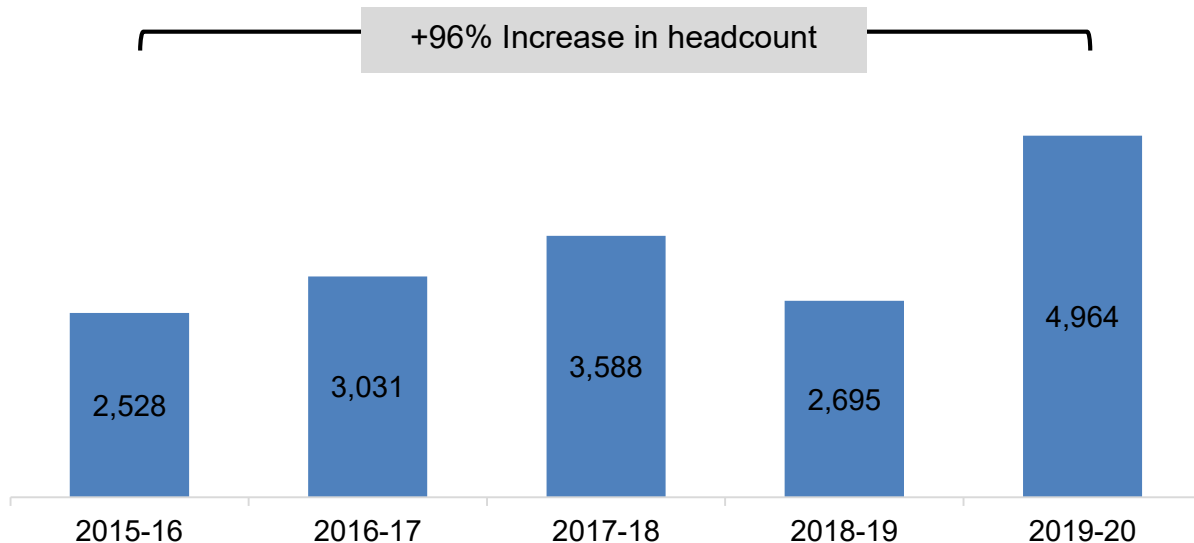[2] Source: Dataquest, California Department of Education

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 enrollments[3] 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.

As with overall headcount, enrollments in CTE Transitions CBE-eligible courses increased each year until 2017-18, decreased in 2018-19 (-25% from prior year), and then increased in 2019-20 (+68% from prior year). The increase in enrollments is despite a decrease in the number of agreements active over this time.

Figure 6. Enrollments, by Year
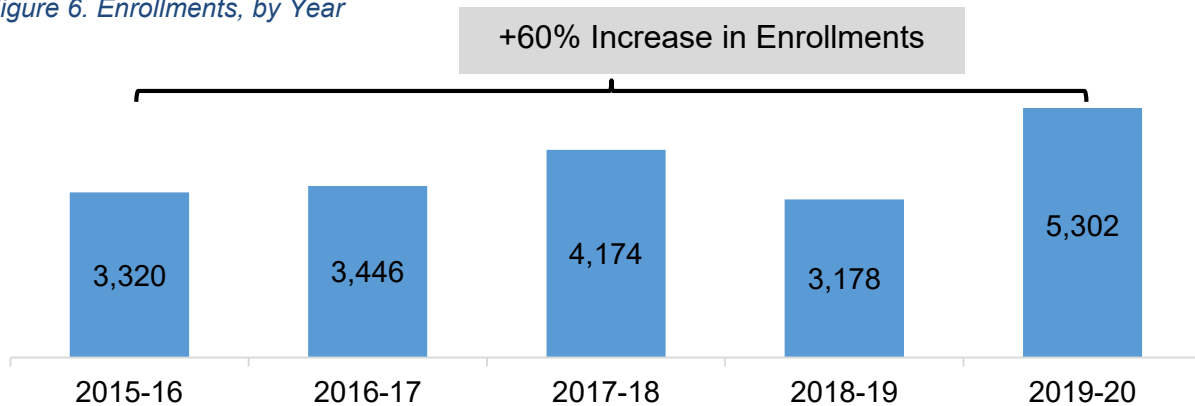
The decrease in enrollments in 2018-19 was consistent in high schools across the San Diego region. High schools in the each of the college's service areas saw similar decreases from 2017-18 to 2018-19 (City: -22%, Mesa: -24%, Miramar: -25%). The increase in enrollments in 2019-20 from the prior year was most pronounced in high schools in the City College service area (+96%), followed by Mesa (+71%) and Miramar (+44%).

See Appendix A for more detail on which high schools belong to each service area.

Figure 7. Enrollments by Service Area of High School

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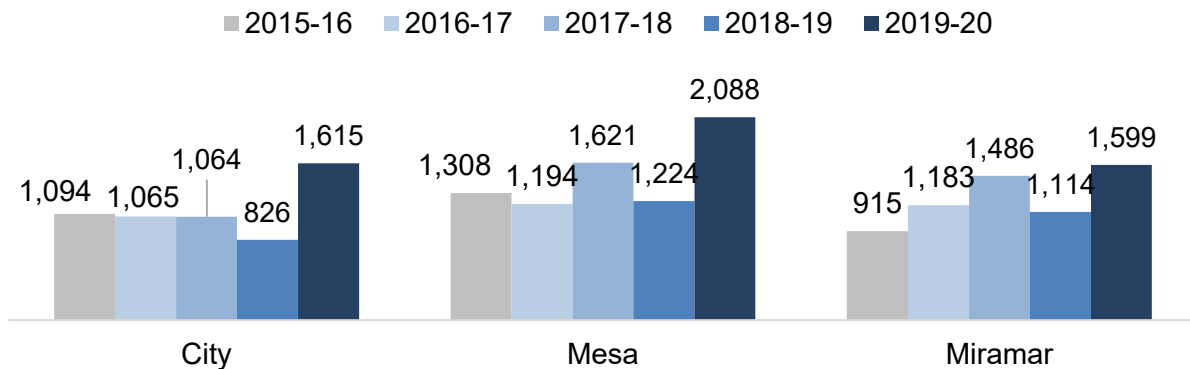
[3] Enrollments are classroom seats: one student who enrolls in two is counted twice.

By High School

Over the five years of data covered by this report, Patrick Henry and Scripps Ranch enrolled the most students in CTE Transitions CBE-eligible courses (2,168 and 2,153 enrollments, respectively).

From 2017-18 to 2019-20, enrollment in CBE-eligible CTE courses grew at 16 of the 20 SDUSD high schools. This includes three of the four SDUSD priority high schools: enrollment increased at Hoover (+280 enrollments, up from 34 in 2017-18), Lincoln (+71 enrollments, up from 76 in 2017-18), and Crawford (+52 enrollments, up from 5 in 2017-18) high schools. Figure 8 shows more detail on annual enrollments by high school in CBE-eligible CTE courses over the last five years.

See Appendix C for enrollment data at all SDUSD high schools, including SDUSD priority schools.

Figure 8. Enrollments by High School
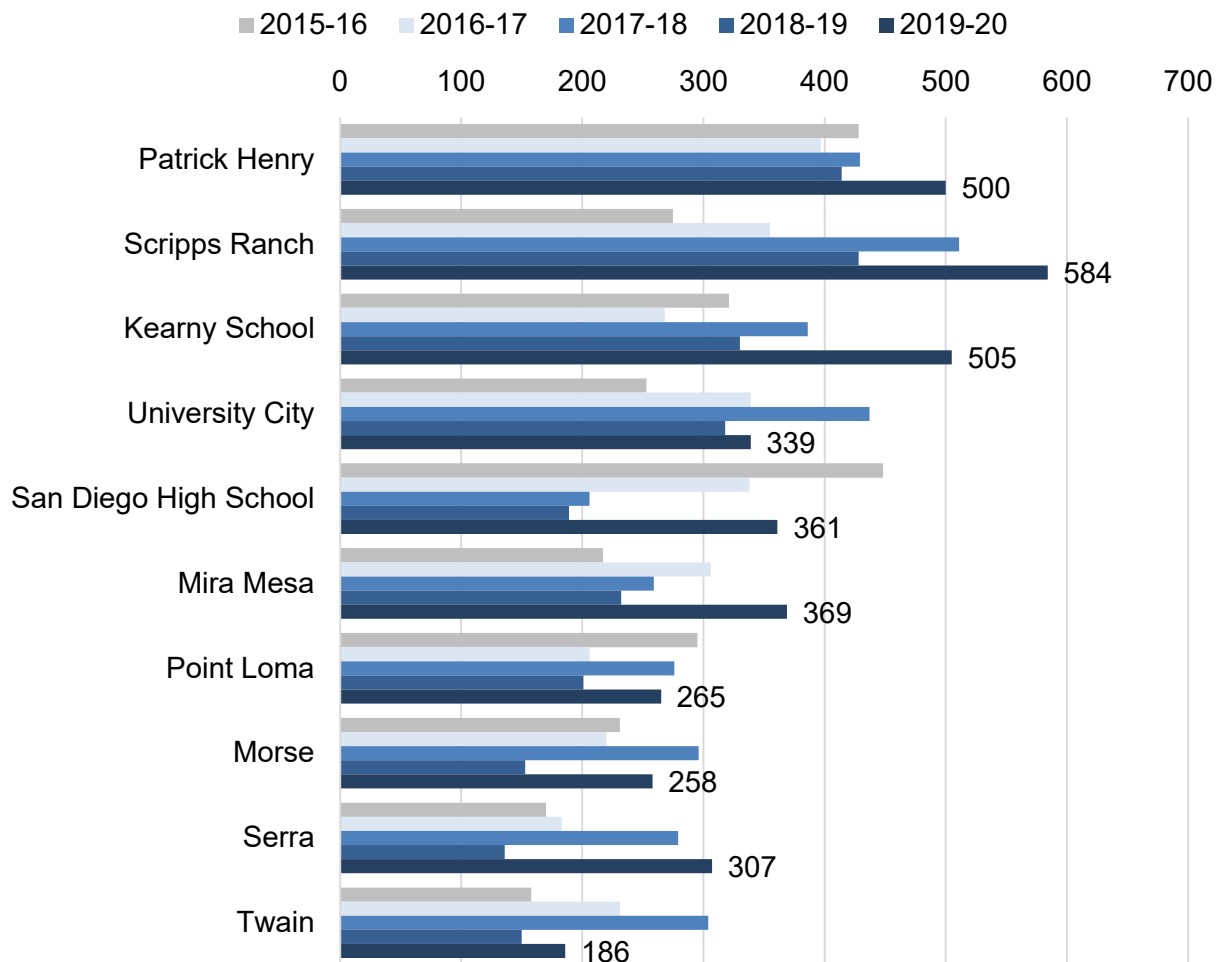
By Subject of College Course

Over the last five years, there have been nearly 20,000 enrollments in CTE Transitions CBE-eligible courses at SDUSD (19,396 total). Engineering has accounted for the largest group of these enrollments (6,183 enrollments, 32% of the total), followed by Graphic Design (2,236 enrollments, 12%) Computer Business Technology[4] (1,973, 10%), and Multimedia (1,921, 10%).

Subjects which have seen increasing enrollment over the last three years include Photography (+239%), Biology (+83%), Multimedia (+61%), Geographic Information Systems (+61%), and Culinary Arts/Management (+38%).

Figure 9 below shows annual enrollments in the ten college-course subjects with the highest enrollment over the last five years. College-course subjects with enrollment in 2019-20 not shown in the graph are Photography (112 enrollments), Machine Technology (164 enrollments), and Fire Protection (46 enrollments).

See Appendix D for more detail on enrollments by subject.

Figure 9. Enrollments by Subject of College Course

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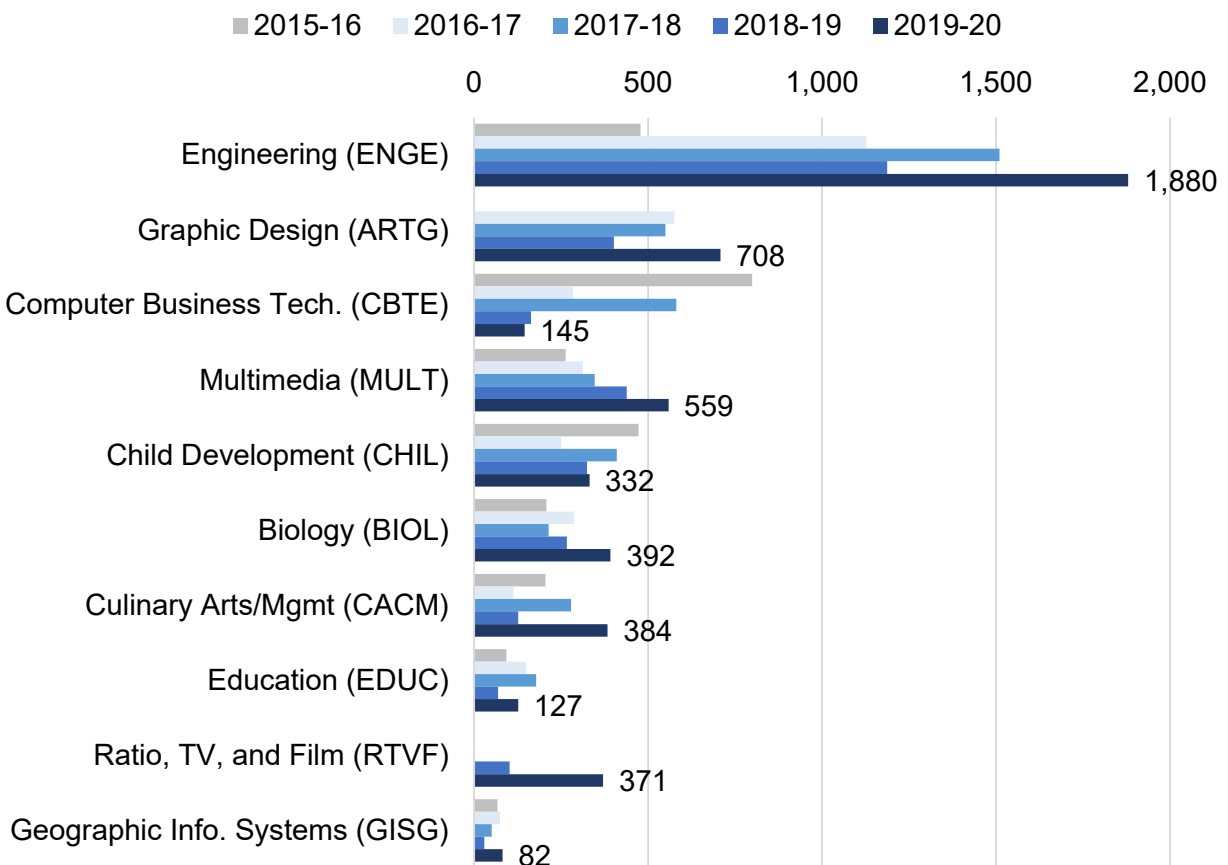
[4] It should be noted that enrollments in high school courses tied to college credit in CBTE have been decreasing each year since 2017-18.

By Gender

As in prior years, there were strong gender patterns in CTE Transitions CBE-eligible courses by college-course subject in 2019-20.

Notably, female students were underrepresented in Engineering (ENGE), accounting for one-quarter of those enrollments. This underrepresentation drove the overall underrepresentation of female students in CTE Transitions courses. This relationship is most visible when examining CTE Transitions enrollments with Engineering excluded: of the 3,422 non-Engineering enrollments, 47% are by female students and 53% are by male students, significantly closer to parity than the 39%-61% actual distribution of enrollments. This underrepresentation at the beginning of the CTE Transitions pipeline exemplifies the challenges of increasing access to STEM fields and jobs in the engineering industry for female students.

Female students were overrepresented in Education (EDUC), Biology (BIOL), Child Development (CHIL), and Photography (PHOT).

Figure 10. 2019-20 Subject of College Course Representation by Gender
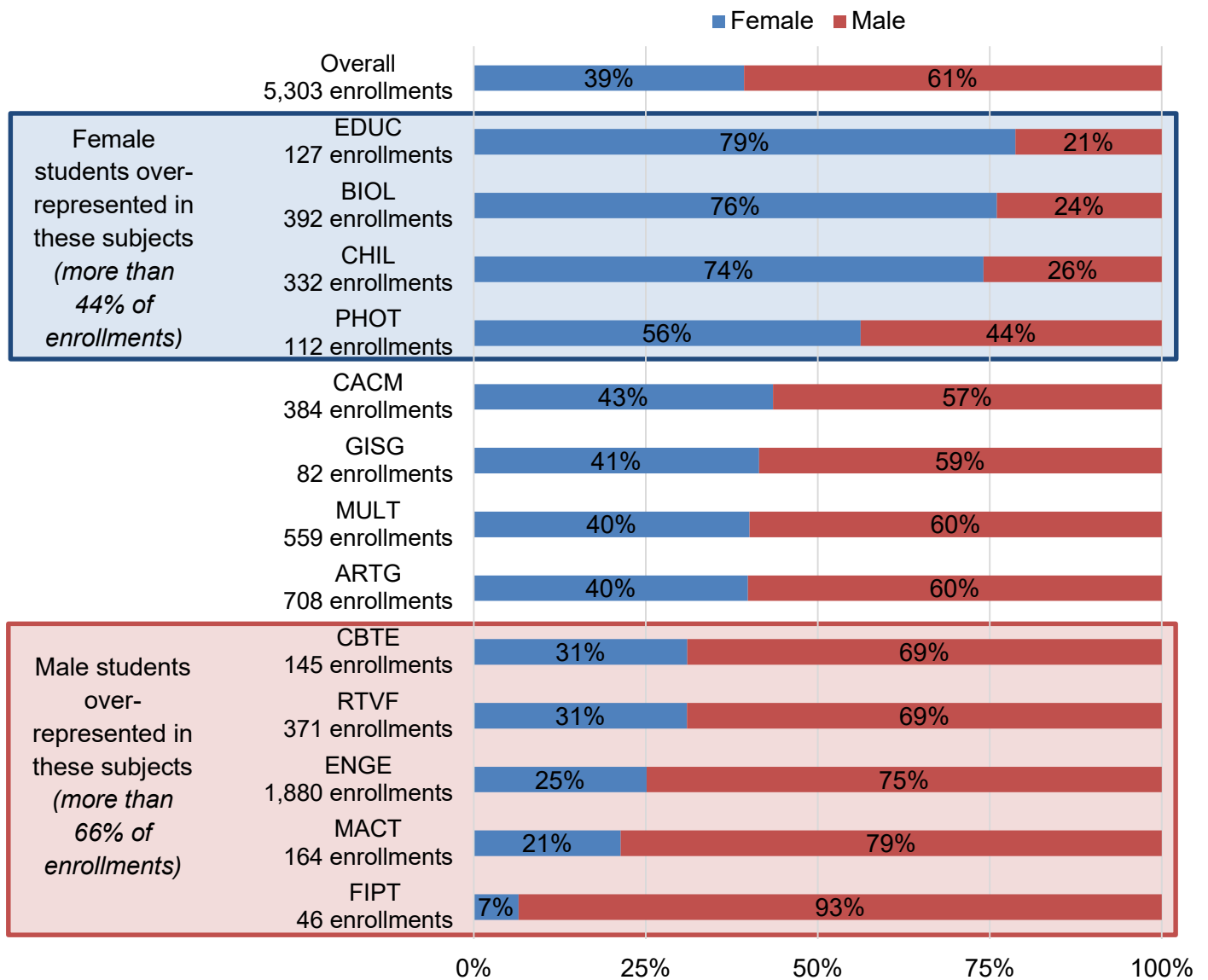
By Ethnicity

Table 1 shows enrollments in CTE Transitions CBE-eligible courses by ethnicity in 2019-20. College-course subjects in which an ethnicity is overrepresented are green; college-course subjects in which an ethnicity is underrepresented are red[5].

Filipino students were overrepresented in Education: while they accounted for 8% of all enrollments, Filipino students accounted for over 28% of enrollments in Education (EDUC) courses.

Latinx students were underrepresented in Graphic Design (ARTG), Education, Engineering (ENGE), and Photography (PHOT). They were most overrepresented in Culinary Arts/Management (CACM) and, Computer Business Technology (CBTE), Fire Protection (FIPT), and Geographic Information Systems (GISG).

The method of identifying over- and underrepresentation in this table is broad and may understate trends in smaller populations. Therefore, it should be noted that African American students accounted for higher proportions of enrollments in Education (EDUC), Multimedia (MULT), and Photography than their overall representation in the program, and a lower proportion of enrollments in Engineering. Of the less than 30 enrollments by Native American students in 2019-20, almost half were in Engineering. Of the less than 30 enrollments by Pacific Islander students, just over one-third were in Engineering.

Table 1. 2019-20 Subject of College Course Representation by Ethnicity

	ARTG n=708	BIOL n=392	CACM n=384	CBTE n=145	CHIL n=332	EDUC n=127	ENGE n=1,880	FIPT n=46	GISG n=82	MACT n=164	MULT n=559	PHOT n=112	RTVF n=371	Overall
African American	7%	11%	11%	10%	7%	13%	6%	11%	10%	7%	12%	12%	9%	**8%**
Asian	14%	18%	9%	7%	11%	8%	18%	2%	15%	10%	7%	11%	10%	**13%**
Filipino	11%	7%	7%	8%	6%	28%	8%	0%	2%	5%	4%	27%	7%	**8%**
Latinx	30%	38%	69%	63%	47%	26%	35%	85%	68%	43%	54%	34%	43%	**42%**
Native American	0%	0%	0%	0%	2%	0%	1%	0%	0%	1%	1%	0%	0%	**0%**
Pacific Islander	0%	0%	1%	1%	1%	2%	1%	0%	0%	1%	0%	0%	1%	**1%**
Unknown	1%	0%	1%	2%	1%	0%	1%	2%	0%	1%	3%	0%	0%	**1%**
White	38%	26%	3%	10%	26%	24%	32%	0%	5%	33%	20%	17%	30%	**27%**

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[5] Instances of over- and underrepresentation were determined in cases where there was a 5% or more difference between enrollment in a subject and overall enrollment.

Around the San Diego Region

Table 2 below shows enrollments by service area of high school, by CTE Industry Sector[6]. This table demonstrates the industries which students in each region access to through the CTE Transitions program. See Appendix B for more detail on which subjects are in each Industry Sector. Each colleges' service area includes the high schools closest to it.

In 2019-20, the most notable difference in enrollment patterns by Industry Sector between the college service areas was that **high schools in the City College service area saw a higher proportion of enrollments in courses in the Hospitality sector, and a lower proportion of enrollments in Construction** (which aligns to Engineering courses) than high schools in Mesa and Miramar College service areas. Construction enrollments accounted for 23% of enrollments at high schools in the City College service area, compared to 40% for Mesa and 40% for Miramar.

Hospitality enrollments were accounted for Culinary Arts/Management. CACM 101 (Sanitation, Safety & Equipment) was offered at four high schools in the City College service area (346 enrollments), one high school in the Mesa service area (19 enrollments), and one high school in the Miramar service area (19 enrollments).

Table 2. Enrollments by industry, at high schools by service area

City Service Area		Mesa Service Area		Miramar Service Area	
Industry	*%*	*Industry*	*%*	*Industry*	*%*
Hospitality	24%	Construction	40%	Construction	40%
Construction	23%	Art/Media	24%	Art/Media	28%
ICT	17%	ICT	13%	Education	11%
Art/Media	14%	Health	7%	Health	8%
Education	11%	Business	6%	ICT	7%
Health	7%	Education	5%	Manufacturing	5%
Public Services	3%	Manufacturing	4%	Hospitality	1%
		Hospitality	1%		

Note. "ICT" is Information Communications Technology.
Note 2. The Construction industry is aligned to Engineering classes only.

The distribution of enrollments shown above largely reflects course availability at high schools and which courses are covered by agreements. For example, agreements for the two engineering courses in the Construction industry are active at all four high schools in the Miramar College service area, compared to four of City College's seven service area high schools. This analysis provides context to the question, "Are course offerings and CBE agreements **reflective of** or **responsive to** equity challenges facing the San Diego region?"

See Appendix A for more detail on which high schools belong to each service area.
See Appendix B for more detail on enrollments by subject, Industry Sector, and High School CTE Pathway.

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[6] For more information about CTE Industry Sectors, see: https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Workforce-and-Economic-Development/Strong-Workforce-Program/Events/K12-SWP-Industry-Sector-Crosswalk

Outcomes of the CTE Transitions Program at SDUSD high schools

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

In 2019-20, 1,051 enrollments in CTE Transitions CBE-eligible courses received college credit, for a total of 2,752.5 college units. While overall enrollments increased from 3,178 in 2018-19 to 5,302 in 2019-20, the number of enrollments receiving college credit in 2019-20 was 40% lower than in the prior year (1,754). It is likely that that COVID-19 was partially responsible for this decrease, as 2019-20 was the first year that there was a decrease in the ratio of students eligible for college credit who actually received it.

Table 3. Enrollments, Enrollments which received Credit, and Credit Received Rate

	2015-16	2016-17	2017-18	2018-19	2019-20	Average 17/18 to 19/20
Total Enrollments	3,320	3,446	4,174	3,178	5,302	4,218
Enrollments eligible for Credit[7]	2,580	2,362	3,112	2,353	1,829	2,431
Enrollments which received Credit	249	1,110	1,891	1,754	1,051	1,565
Credit Received Rate, **out of total**	8%	32%	45%	55%	20%	37%
Credit Received Rate, **out of eligible**	10%	47%	61%	75%	57%	64%

Figure 11. Five-year trend, headcount and college credit

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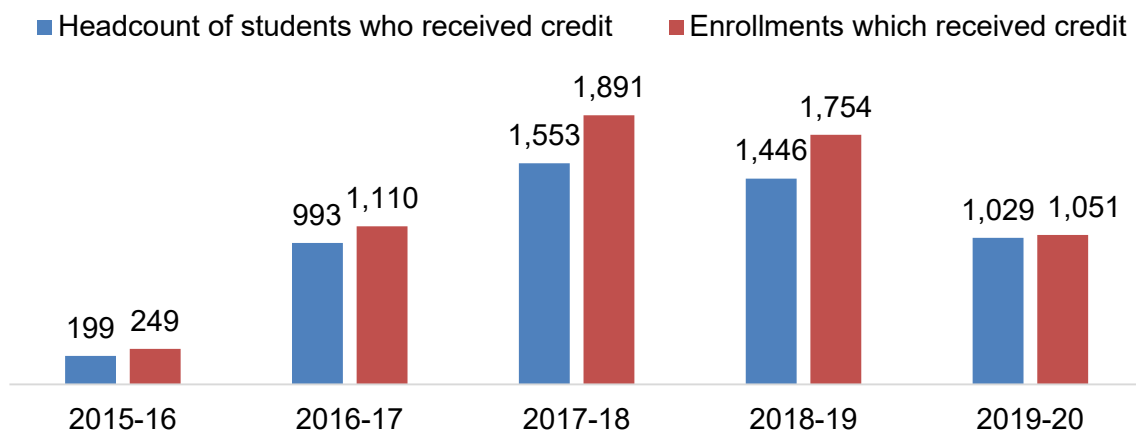
[7] Students who receive an A or B in the course and pass the end-of-course requirement are eligible to receive college credit.

By High School

In 2019-20, Scripps Ranch High School awarded college credit for the most enrollments (238), followed by Patrick Henry High School (167) and University City High School (88). In line with the overall trend, most high schools awarded college credit for fewer enrollments in 2019-20 than in 2018-19, with the exception of Mission Bay (+9), Clairemont (+25), Hoover (+6), SET (+25), and Mt. Everest Academy (+1). As of the publication of this report, no students at the San Diego High School (or San Diego Educational Complex) had received college credit for CTE Transitions CBE-eligible coursework in 2019-20.

See Appendix E for more detail on college credit awarded by high school in 2019-20.
See Appendix K for student checkpoint progress by high school.

Figure 12. Top 5 High Schools by College Credit Awarded
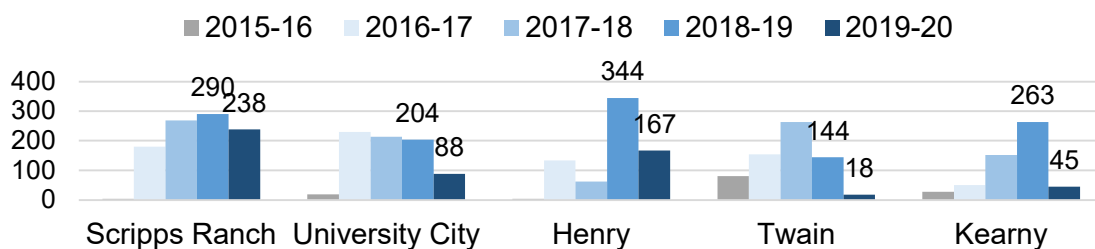
By Subject of College Course

As in prior years, Engineering accounted for the most enrollments for which college credit was awarded in 2019-20 (593). Multimedia accounted for the second-most (98), followed by Child Development (96). It appears that most students in Digital Media (ARTG 125) were unable to meet the end-of-course requirement (portfolio and exam), as only 23 of 708 students passed this requirement, and only 2 of those received credit[8]. In addition, students in Machine Technology (MACT 140) were unable to complete their EOC due to COVID-19, and no students in Fire Protection received college credit.

See Appendix F for more detail on college credit awarded by subject in 2019-20.
See Appendix L for student checkpoint progress by subject.

Figure 13. Top 5 Subjects by Awarded College Credit

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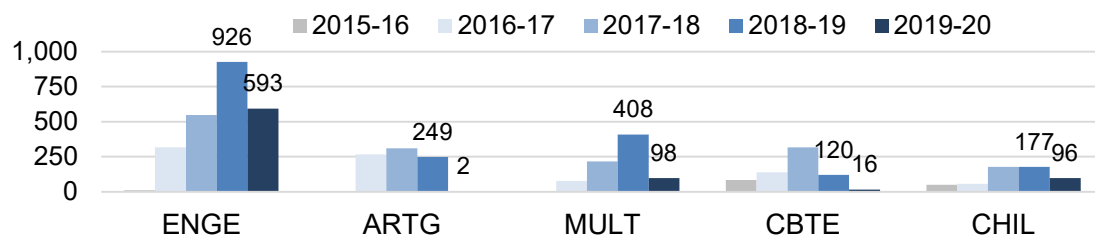
[8] To mitigate this impact of COVID-19 on ARTG students, several alternate ways were created for students to meet the EOC requirement. As students continue to complete the process, it is possible the number of students who receive college credit for ARTG for high school coursework in 2019-20 will increase.

CTE Transitions Checkpoints

Data newly available for the 2019-20 academic year makes it possible to track student progress through four checkpoints on the SDUSD side of the CTE Transitions program. The four checkpoints are **Enroll**, **Meet Course Requirement**, **Meet End of Course Requirement**, and **Receive Credit.** This section examines student progress towards receiving credit, and identifies groups disproportionately impacted in achieving that outcome.

Enroll in CBE-eligible courses	Meet Course Requirement	Meet EOC Requirement	Receive Credit
Students who enrolled in a CBE-eligible CTE course	Students who received an A or B grade	Students who received an A or B on the end-of-course requirement (EOC)	Students who Met Course Req., Met EOC Req., and **submitted a petition** that was processed.
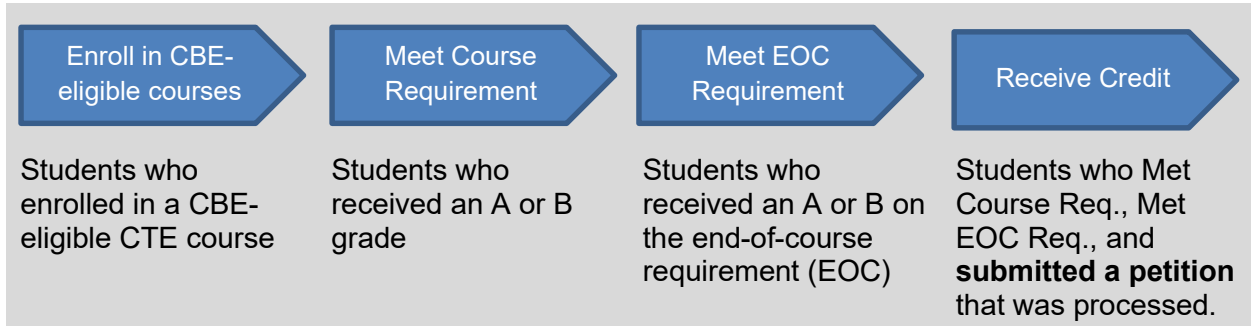
In 2019-20, there were 5,302 enrollments in CTE Transitions CBE-eligible courses. For 3,589 of those enrollments (68%), students received an A or B in the course. For 1,829 enrollments (34%), students received an A or B both in the course and on the end-of-course (EOC) requirement. Finally, college credit was awarded for 1,051 enrollments (20%).

Figure 14. 2019-20 Checkpoint Completion Rates

> **43% of students eligible to receive credit did not complete the paperwork (778 of 1,829 who Passed EOC)**

> **In 2019-20, for every 10 students who enrolled** in a CBE-eligible CTE course:
> - ➤ **7** received an A or B in the course
> - ➤ **3** received an A or B on the end-of-course requirement
> - ➤ **2** received college credit

By Ethnicity

In 2019-20, there were notable differences in program completion by ethnicity. While Latinx students accounted for 42% all enrollments, they were just 27% of those who received credit. African American students also accounted for a smaller proportion of those receiving credit (5%) than overall enrollments (8%). Disproportionate impact on groups who received credit at lower rates is discussed on the next page.

It does not appear that meeting the end of course requirement (Met EOC) is affecting representation in those who receive credit: representation among those who Met EOC is similar to those who Met Course Requirement.

There is evidence of equity challenges in two check points: Met Course Requirement and Received Credit (after meeting the end-of-course requirement*). Latinx students accounted for 33% of those who met the course requirement, compared to 42% of those who enrolled. This discrepancy is reflective of achievement gaps often observed in course outcomes.

The other checkpoint where significant differences in representation are observed is **Received Credit**: compared to those who Met EOC Requirement, there were 7% less Latinx students and 2% less African American students. Further, this checkpoint contributed significantly to the disproportionate impact experienced by these groups: of the 631 Latinx students and 119 African American students eligible to receive credit (met course requirement *and* met EOC requirement), only 45% and 42% (respectively) received credit, compared to 71% and 67% of white and Asian students.

See Appendix G for counts of students who reached each checkpoint, by ethnicity. Figure 16 below shows overall representation in each of the four checkpoints.

Figure 15. 2019-20 SDUSD Ethnicity in CTE CBE Checkpoints
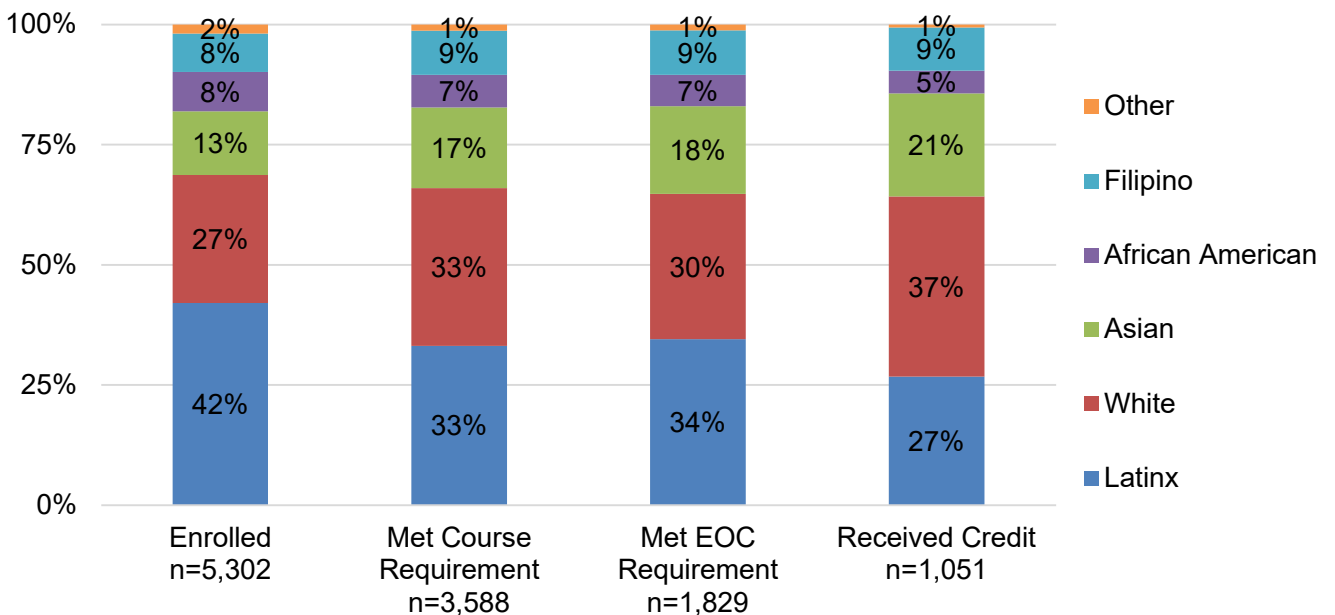
Figure 17 below shows, by ethnicity, the percent of enrollees in the largest ethnicity groups who achieved each checkpoint towards receiving credit.

Overall, 68% of student enrollments received an A or B in the course; 34% met the end-of-course requirement (EOC); 20% received credit. The 14% difference between those who Met EOC Requirement and those who Received Credit represents 778 students who had completed academic requirements to receive credit, but not the paperwork.

Asian and White students achieved Passed Course at the highest rates (86% and 83%), with Latinx and African American students at the lowest rates (53% and 56%).

Overall, 49% of students who Met Course Requirement did not Meet the EOC requirement (1,760 enrollments). This is either because they did not take the EOC, the EOC wasn't available due to COVID-19, or they took the EOC and did not receive an A or B. Groups with larger decreases at this checkpoint (White, Asian, Filipino) were also the groups with higher rates of passing the course.

> **The 14% difference between those who Passed EOC and those who Received Credit represents 778 students who had <u>completed academic requirements</u> to receive credit, but <u>not the paperwork</u>.**

Students complete the final checkpoint, Received Credit, by completing a petition created by SDUSD[9], who then sends these petitions in a batch to SDCCD Instructional Services. In addition to accounting for 778 enrollments that did not receive credit (which were otherwise eligible), this checkpoint contributes to disproportionate impact on Latinx and African American students in receiving credit. Not shown in the graph, of the ~10 Native American students who Passed EOC, over half did not receive credit.

See Appendix G for counts of students eligible for credit who did not receive it, by ethnicity.

Figure 16. 2019-20 Participant Progress Through Checkpoints

■ Met Course Requirement ■ Met EOC Requirement ■ Received Credit

	*Latinx n=2,230	White n=1,413	Asian n=700	*African American n=436	Filipino n=422
Met Course Requirement	53%	83%	86%	56%	78%
Met EOC Requirement	28%	39%	48%	27%	40%
Received Credit	13%	28%	32%	11%	22%
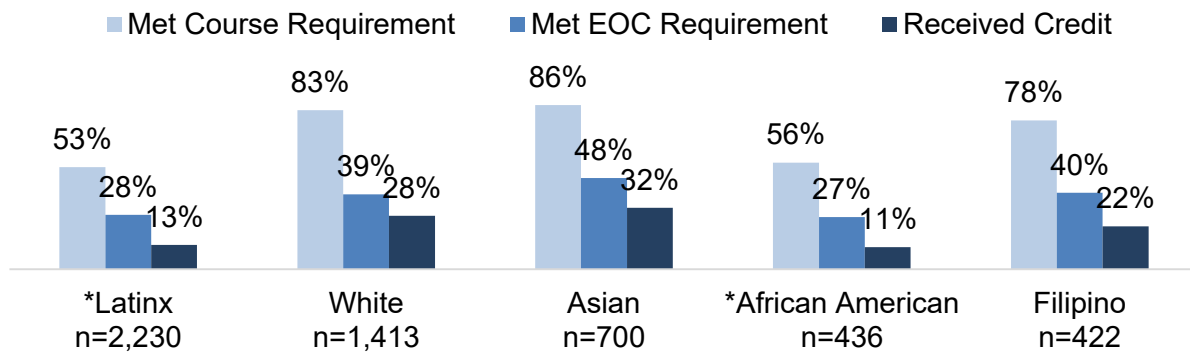
*Note. Groups that were disproportionately impacted (DI). in received credit indicated with an *.
Not shown, Pacific Islander and Native American students were also DI.*

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[9] Students and parents must sign this petition; during Spring 2020, COVID-19 posed a challenge to communicating and following up with parents and students. Students have 18 months after completion of the course to complete this petition, so it is possible the number of students who receive college credit for high school coursework in 2019-20 will increase.
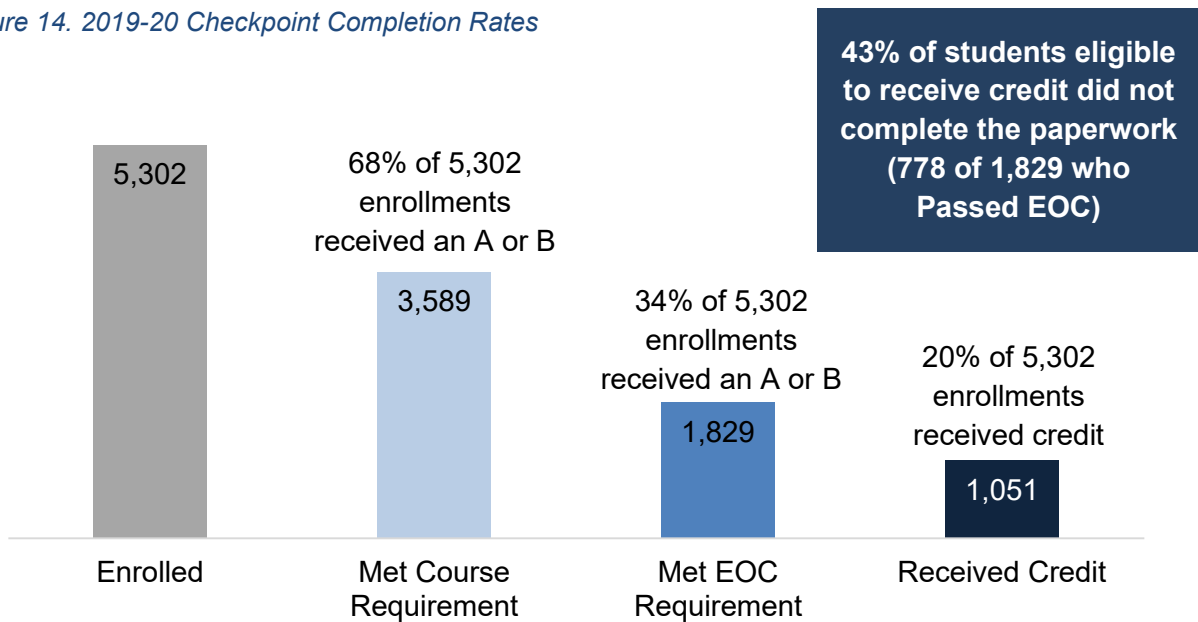
By Other Demographic Factors

This report also examined the relationship between receiving credit and other demographic factors, including gender, special education status, parental education, and English proficiency. Disproportionate impact (DI) was found on students who were male, in special education, whose parents' education was less than a college degree, and who were English learners or who were Reclassified as Fluent English Proficient (RFEP).

Table 4. 2019-20 Disproportionately Impacted Groups

Disproportionately Impacted Group	% Received Credit
Male students	17%
Special Education students	9%
Parental education: less than college graduate	13%
Language Status: English Learner or RFEP	14%
Overall	**20%**

DI on male students was moderate: they were successful in receiving credit at a rate 6% lower than female students (17.4% for male students, 23.5% for female students). If 152 more male students received credit (in addition to the 561 who did), their success rate would not represent DI.

DI on special education students was significant, and the highest of all groups examined: they were successful in receiving credit at a rate 24% lower than non-special education students. If 94 more special education students received credit (in addition to the 41 who did), their success rate would not represent DI.

DI on students whose parents had less than a college degree was moderate. Lower levels of parental education were related to stronger rates of DI: students whose parents did not graduate high school received credit at a rate 10% lower than the reference group (students whose parents hold graduate degrees); students whose parents graduated high school but did not attend college received credit at a rate 9% lower; students whose parents had some college received credit at a rate 6% lower.

See Appendix H for more detail on these groups.

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: despite COVID-19 uprooting many parts of students' lives in the Spring of 2020, the program still awarded over 2,700 college units that year. This section examines students who received college credit through CTE Transitions and then enrolled at of the SDCCD colleges, and how many of those students remained in their pathway.

Three cohorts of students were tracked for enrollment at SDCCD after they received college credit through the CTE Transitions program: high school graduates in 2017, 2018, and 2019. These cohorts include students who received college credit between 2015-16 and 2018-19.

Students in these cohorts were tracked through the 2019-20 academic year (the most recent year for which data was available) for enrollments[10] at City, Mesa, or Miramar College. 2017 graduates were tracked through three full academic years, 2018 graduates for two years, and 2019 graduates for one academic year. The percent who enrolled in a related pathway is an estimate based on the subject of these students' enrollments at SDCCD; enrollments in subjects similar to the high school CTE pathway were counted as "related."

Of the 2,186 students in the three cohorts, 37% 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. Overall, 14% of students enrolled in a course related to the pathway in which they received credit through the CTE Transitions Program; again, these rates were higher for the 2017 cohort (22%) than for the other cohorts, as many students primarily enroll in general education courses in their first year or two of college.

The SDCCD enrollment rate for the 2019 cohort (29%) is comparable to the rate for CCAP seniors who graduated in 2019 and then enrolled at SDCCD the following fall (30%). The overall SDCCD enrollment rate for CTE Transitions students who received college credit (37%) was comparable with the rate at which all SDUSD students enroll at SDCCD in the year following graduation (32%, five year average).

Table 5. Subsequent Enrollment Cohorts and Outcomes Summary

Graduation Year	Number of Students	% Enrolled at SDCCD	% Enrolled in related Pathway
2017	397	53%	22%
2018	892	37%	14%
2019	897	29%	11%
3-Cohort Total	**2,186**	**37%**	**14%**

Background Context

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

When CTE Transitions students enrolled at SDCCD, they largely enrolled in Math (14%-15% of all enrollments per cohort), English (12% to 16%), and Chemistry (5% to 7%).

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

See Appendix I for more detail on SDCCD enrollments per cohort.

Related Pathway SDCCD Enrollment Rates

Table 6 on the next page shows the subsequent enrollment patterns of CTE Transitions students by the high school CTE pathway of the course in which they received credit. **SDCCD enrollees** are students who enrolled at SDCCD after high school graduation, and **In-Path SDCCD enrollees** are students who enrolled in a course related to the high school pathway for which they received credit.

See Appendix J for a crosswalk of courses to High School CTE Pathways, and subjects at SDCCD related to those pathways.

Overall, CTE credit recipients in all but three high school CTE pathways enrolled in SDCCD at higher rates than all SDUSD graduates (32% over the last five years); the three pathways with lower SDCCD enrollment rates[11] are Architecture Design (28%), Engineering Technology (28%), and Business and Finance (24%).

> Top 3 Pathways by SDCCD Enrollment rate
>
> 1. Food Service and Hospitality (57%)
> 2. Software and Systems Development (57%)
> 3. Production and Managerial Arts (45%)

High SDCCD enrollment rates, low rates in pathway: Students who received credit in the Food Service and Hospitality and Software and Systems Development pathways enrolled at SDCCD at the highest rate (57%). However, these students do not tend to enroll in courses related to their pathways at SDCCD: 5% and 4% (respectively) of those students enrolled in courses related to their pathway.

> Top 3 Pathways by Count of SDCCD enrollees
>
> 1. Design, Visual, and Media Arts (324)
> 2. Graphic Production Tech. (115)
> 3. Machining & Forming Tech. (92)

High volume pathways: The Design, Visual, and Media Arts pathway both produced the largest number of SDCCD enrollees (324, 40% of credit recipients) and resulted the highest rate of students whose SDCCD enrollments were related to their High School CTE Pathway (24%).

Graphic Production Technologies credit recipients enrolled at SDCCD at similar rates, both overall (36%) and in a related pathway (17%); Graphic Production Technologies also produced the second-highest volume of SDCCD enrollees (115). While Machining and Forming Technologies accounted for the third-most SDCCD enrollees (92), only 2 of those students enrolled in a related subject.

---

[11] The denominator for the SDCCD enrollment rate is students who graduated in a given year who received college credit in a High School CTE Pathway. The numerator for the SDCCD enrollment rate is those who also enrolled SDCCD by the Summer 2020 term.

Table 6. Subsequent Enrollment by HS CTE Pathway, Graduates of 2017, 2018, and 2019 (total)

High School CTE Pathway	Graduates	Enrolled at SDCCD	SDCCD Enroll Rate	In-Path SDCCD Enrollees	In-Path SDCCD Enrollee Rate
Food Service & Hospitality	100	57	57%	5	5%
Software and Systems Development	53	30	57%	2	4%
Production and Managerial Arts	47	21	45%	11	23%
Education	120	53	44%	15	13%
Design, Visual, and Media Arts	803	324	40%	194	24%
Legal Practices, Pub. Safety and Emgncy. Response	8	3	38%	0	0%
Graphic Production Technologies	322	115	36%	55	17%
Patient Care and Biotechnology	259	90	35%	40	15%
Child Development	240	81	34%	21	9%
Machining & Forming Technologies	283	92	33%	2	1%
Architecture Design	165	46	28%	2	1%
Engineering Technology	165	46	28%	2	1%
Business and Finance	241	58	24%	5	2%
Unduplicated SDUSD Graduates	**2,186**	**804**	**37%**	**313**	**14%**

Note. Some CBE-eligible CTE courses fulfill more than one high school CTE Pathway, so graduates by High School CTE Pathway are duplicated by pathway. For example, ENGN 130 fulfills both Architecture Design and Engineering Technology pathways; further, this was the only course in those pathways for which students received credit. The unduplicated count of graduates, SDCCD enrollees, and in-path SDCCD enrollees is included on the bottom.

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?*

Nearly a third of the 5,302 enrollments in 2019-20 were in **Engineering** courses. **Graphic Design** was the second largest subject in 2019-20, followed by **Multimedia**

Patrick Henry, **Scripps**, and **Kearny High Schools** had the largest numbers of enrollments in 2019-20.

2) *What is the composition of students who are enrolling in CBE-eligible courses?*

41% of CTE Transitions students were Latinx, 27% were White, 14% were Asian, and African American and Filipino students each were 8%. CTE Transitions students were less likely than SDUSD to be Latinx and more likely to be White or Asian.

3) *How many students demonstrate competency in CBE-eligible courses?*

1,051 enrollments received credit in 2019-20, or 20% of all enrollments; students earned more than 2,700 college units that year. 593 of these enrollments were in engineering, 98 were in Multimedia, and 96 were in Child Development. This is 57% of students who were eligible to receive credit; this ratio was significantly impacted by COVID-19.

4) *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?*

Enrollments at High schools in Mesa and Miramar college service areas had a higher proportion of STEM enrollments in 2019-20 than high schools in the City College service area.

Overrepresentation of male students in Engineering (75% of engineering enrollments by male students) drove overrepresentation of males in the CTE Transitions program.

778 students who completed academic requirements to receive credit did not complete the required paperwork. This final checkpoint contributed to disproportionate impact on Latinx and African American students, students who were English learners and who were reclassified as fully English Proficient, and students whose parents have less than a college degree.

5) *Do students who receive credit by exam from local school districts end up enrolling at SDCCD? Do these students end up enrolling in courses related to their high school CTE Pathway?*

37% of students who earn credit through the CTE Transitions program end up enrolling at SDCCD and 14% end up enrolling in courses related to the high school CTE pathway in which they earned credit.

High-volume pathways, or pathways which produced the largest numbers of SDCCD enrollees, included Design, Visual, and Media Arts and Graphic Production Technologies. Nearly 1 in 4 credit recipients in Design, Visual, and Media arts and Production and Managerial Arts ended up enrolling in courses related to those pathways at SDCCD.

Next Steps

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Agreements

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- Continue to develop opportunities for students to earn college credit for **high school pathways with large enrollment numbers**. High-enrollment pathways at SDUSD Priority High Schools represent large groups of potential credit-earners.

- 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.

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Outreach

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- **Strengthen outreach to parents and students to complete credit petition forms**, clarifying and simplifying language when possible.

- Continue to **follow up with students impacted by COVID-19** regarding completion of petition forms for enrollments in the 2019-20 academic year.

- Explore the feasibility of **leveraging existing services to communicate with** disproportionately impacted groups such as **Special Education and English Learner students** regarding completion of petition forms.

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Data

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- Continue to support **data sharing between SDUSD and SDCCD**.

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Appendix

Appendix A

Table 7. High Schools by Service Area

City Service Area	Mesa Service Area	Miramar Service Area
Crawford Garfield Hoover Lincoln Morse SD High School SD School of Crtv. & Prfmg. Arts	Clairemont Patrick Henry Kearny La Jolla Madison Mission Bay Mt. Everest Point Loma Mark Twain	Mira Mesa Scripps Ranch Serra University City

Appendix B

Table 8. Industry Sector, College Course, and HS CTE Pathway of 2019-20 Enrollments

Industry Sector	Subject of College Course	Total Enrollments	HS CTE Pathway
Art/Media	ARTG: Graphic Art	708	Design, Visual, and Media Arts
	PHOT: Photography	112	Design, Visual, and Media Arts
			Graphic Production Technologies
	RTVF: Radio, TV, Film	371	Production and Managerial Arts
Business	CBTE: Computer Business Tech.	145	Business and Finance
Construction	ENGE and ENGN: Engineering	1,880	Graphic Production Technologies
			Machine and Forming Technologies
			Architecture Design
			Engineering Technology
Education	CHIL: Child Development	332	Child Development
	EDUC: Education	127	Education
Health	BIOL: Biology	392	Patient Care and Biotechnology
Hospitality	CACM: Culinary Arts/Mgmt.	384	Food Service and Hospitality
Information & Communication Technologies (ICT)	GISG: Geographic Info. Systems	82	Software and Systems Development
	MULT: Multimedia	559	Software and Systems Development
			Games and Simulation
Manufacturing	MACT: Machine Tech.	164	Engineering Technology
Public Services	FIPT: Fire Protection	46	Legal Practices
			Public Safety and Emergency Response

Appendix C

Table 9. Enrollments by High School

	2015-16	2016-17	2017-18	2018-19	2019-20	Total	17-18 to 19-20 Change	17-18 to 19-20 % Change
Patrick Henry	428	397	429	414	500	2,168	71	17%
Scripps Ranch	275	355	511	428	584	2,153	73	14%
Kearny School	321	268	386	330	505	1,810	119	**31%**
University City	253	339	437	318	339	1,686	-98	-22%
San Diego High School	448	338	206	189	361	1,542	155	75%
Mira Mesa	217	306	259	232	369	1,383	110	42%
Point Loma	295	206	276	201	265	1,243	-11	-4%
Morse	**231**	**220**	**296**	**153**	**258**	**1,158**	**-38**	**-13%**
Serra	170	183	279	136	307	1,075	28	10%
Twain	158	231	304	150	186	1,029	-118	-39%
Mission Bay	156	97	193	24	266	736	73	38%
Clairemont	31	72	174	91	280	648	106	61%
Garfield	61	49	119	92	169	490	50	42%
Hoover	**2**	**45**	**34**	**50**	**314**	**445**	**280**	**824%**
La Jolla	0	72	109	90	144	415	35	**32%**
Lincoln	**47**	**6**	**76**	**119**	**147**	**395**	**71**	**93%**
Madison	77	74	51	74	114	390	63	124%
Crawford	**135**	**116**	**5**	**2**	**57**	**315**	**52**	**1,040%**
San Diego SCPA	12	60	24	71	123	290	99	413%
Mt. Everest Academy	0	8	3	0	14	25	11	367%

SDUSD Priority High Schools highlighted in yellow.

Schools which experienced enrollment growth of greater than 30% between 2017-18 and 2018-19 highlighted in green.

Appendix D

Table 10. Enrollments by Subject of College Course

	2015-16	2016-17	2017-18	2018-19	2019-20	Total	17-18 to 19-20 Change	17-18 to 19-20 % Change
Engineering (ENGE)	478	1,128	1,510	1,187	1,880	6,183	370	25%
Graphic Design (ARTG)	0	576	550	402	708	2,236	158	29%
Computer Business Tech. (CBTE)	799	284	581	164	145	1,973	-436	-75%
Multimedia (MULT)	263	313	347	439	559	1,921	212	61%
Child Development (CHIL)	473	250	410	325	332	1,790	-78	-19%
Biology (BIOL)	208	287	214	267	392	1,368	178	83%
Culinary Arts/Mgmt (CACM)	205	113	279	127	384	1,108	105	38%
Education (EDUC)	93	150	179	69	127	618	-52	-29%
Ratio, TV, and Film (RTVF)	0	0	0	102	371	473	371	---
Geographic Info. Systems (GISG)	67	75	51	30	82	305	31	61%
Photography (PHOT)	59	31	33	58	112	293	79	239%
Machine Technology (MACT)	70	50	0	0	164	284	164	---
Manufacturing Engineering Technology (MFET)	280	0	0	0	0	280	0	---
Business (BUSE)	213	0	0	0	0	213	0	---
Automotive Technology (AUTO)	45	124	0	0	0	169	0	---
Hospitality and Tourism (HOSP)	64	59	17	0	0	140	-17	-100%
Fire Protection (FIPT)	3	6	3	8	46	66	43	1433%

Subject which experienced enrollment growth of greater than 30% between 2017-18 and 2018-19 highlighted in green.

Appendix E

Table 11. 2019-20 Received Credit by High School

	Enrolled	Met Course Requirement	Met EOC Requirement	Received Credit
Scripps Ranch High	584	91%	55%	41%
Kearny High School	505	48%	24%	9%
Henry High	500	86%	49%	33%
Mira Mesa High	369	70%	15%	9%
San Diego High School	361	49%	24%	7%
University City High	339	91%	31%	26%
Hoover High	**314**	**46%**	**43%**	**13%**
Serra High	307	70%	30%	9%
Clairemont High	280	66%	33%	23%
Mission Bay High	266	62%	21%	12%
Point Loma High	265	75%	28%	25%
Morse High	**258**	**48%**	**40%**	**25%**
Twain High	186	48%	46%	10%
Garfield High	169	28%	22%	14%
Lincoln High	**147**	**71%**	**62%**	**26%**
La Jolla High	144	88%	26%	24%
San Diego SCPA	123	88%	52%	20%
Madison High	114	63%	19%	12%
Crawford High	**57**	**81%**	**0%**	**0%**
Mt. Everest Academy	14	79%	50%	7%
Total	**5,302**	**68%**	**34%**	**20%**

SDUSD Priority High Schools highlighted in yellow.

Appendix F

Table 12. 2019-20 Received Credit by Subject of College Course

	Enrolled	Met Course Requirement	Met EOC Requirement	Received Credit
ENGN	1,880	70%	42%	32%
ARTG	708	72%	3%	0%
MULT	559	63%	51%	18%
BIOL	392	77%	26%	21%
CACM	384	41%	36%	11%
RTVF	371	75%	18%	9%
CHIL	332	67%	50%	29%
MACT	164	74%	0%	0%
CBTE	145	54%	52%	11%
EDUC	127	74%	58%	40%
PHOT	112	71%	45%	21%
GISG	82	30%	28%	16%
FIPT	46	91%	78%	0%
Total	**5,302**	**68%**	**34%**	**20%**

Appendix G

Table 13. 2019-20 Checkpoint Progress by Ethnicity

	Enrolled	Met Course Requirement	Met EOC Req.	Received Credit	Eligible, No Credit (Met EOC Req. minus Received Credit)
*Latinx	2,229	1,189	631	281	*350*
White	1,413	1,177	553	394	*159*
Asian	700	602	334	225	*109*
*African American	436	243	119	50	*69*
Filipino	422	329	169	94	*75*
*Unknown	50	15	7	2	*5*
Pacific Islander	28	17	7	2	*5*
Native American	24	16	9	3	*6*
Total	**5,302**	**3,589**	**1,829**	**1,051**	***778***

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

Appendix H

Figure 17. 2019-20 Checkpoint Progress by Special Ed
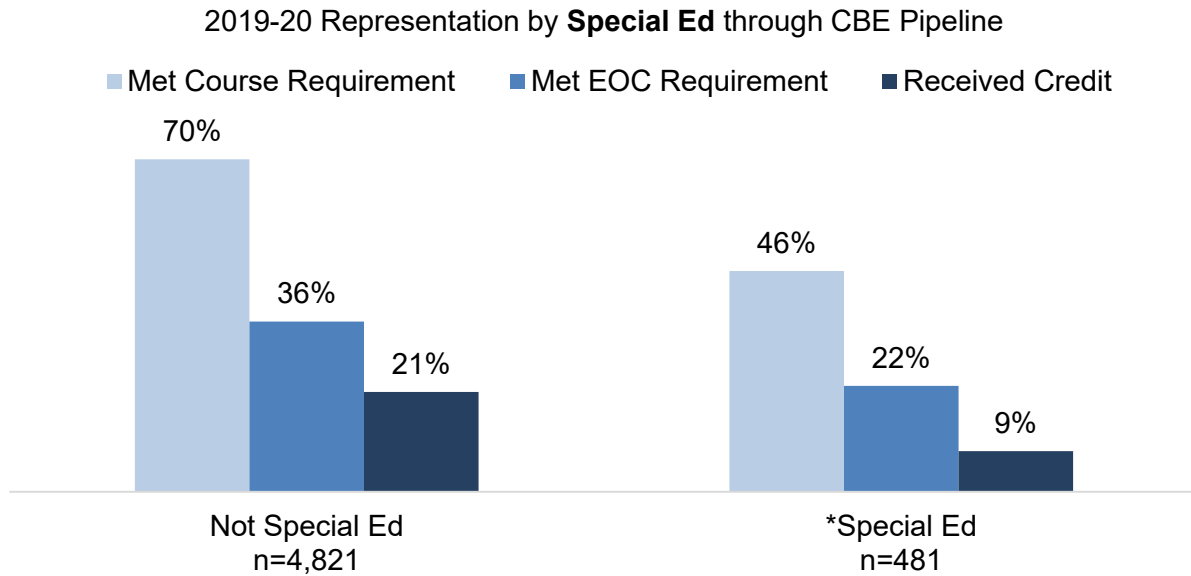
2019-20 Representation by **Special Ed** through CBE Pipeline

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

2019-20 CBE CTE by Special Ed, SDUSD, Counts

	Enrolled	Met Course Requirement	Met EOC Req.	Received Credit	Eligible, No Credit (Met EOC Req. minus Received Credit)
Not Special Ed	4,821	3,366	1,722	1,010	*712*
Special Ed	481	223	107	41	*66*
Total	**5,302**	**3,589**	**1,829**	**1,051**	*778*

Appendix H continued

Figure 18. 2019-20 Checkpoint Progress by Parental Education Level

2019-20 Representation by **Parental Ed** through CBE Pipeline

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

2019-20 CBE CTE by Parent Ed, SDUSD, Counts

	Enrolled	Met Course Requirement	Met EOC Requirement	Received Credit	Eligible, No Credit (Met EOC Req. minus Received Credit)
Not a high school graduate	588	288	172	62	*110*
High school graduate	760	412	226	92	*134*
Some college (includes AA degree)	932	576	269	135	*134*
College graduate	1,314	999	496	322	*174*
Graduate school/ post-graduate training	1,057	916	473	360	*113*
Declined to state or unknown	651	398	193	80	*113*
Total	**5,302**	**3,589**	**1,829**	**1,051**	*778*

Appendix H continued

Figure 19. 2019-20 Checkpoint Progress by English Proficiency

2019-20 Representation by **English Proficiency** through CBE Pipeline

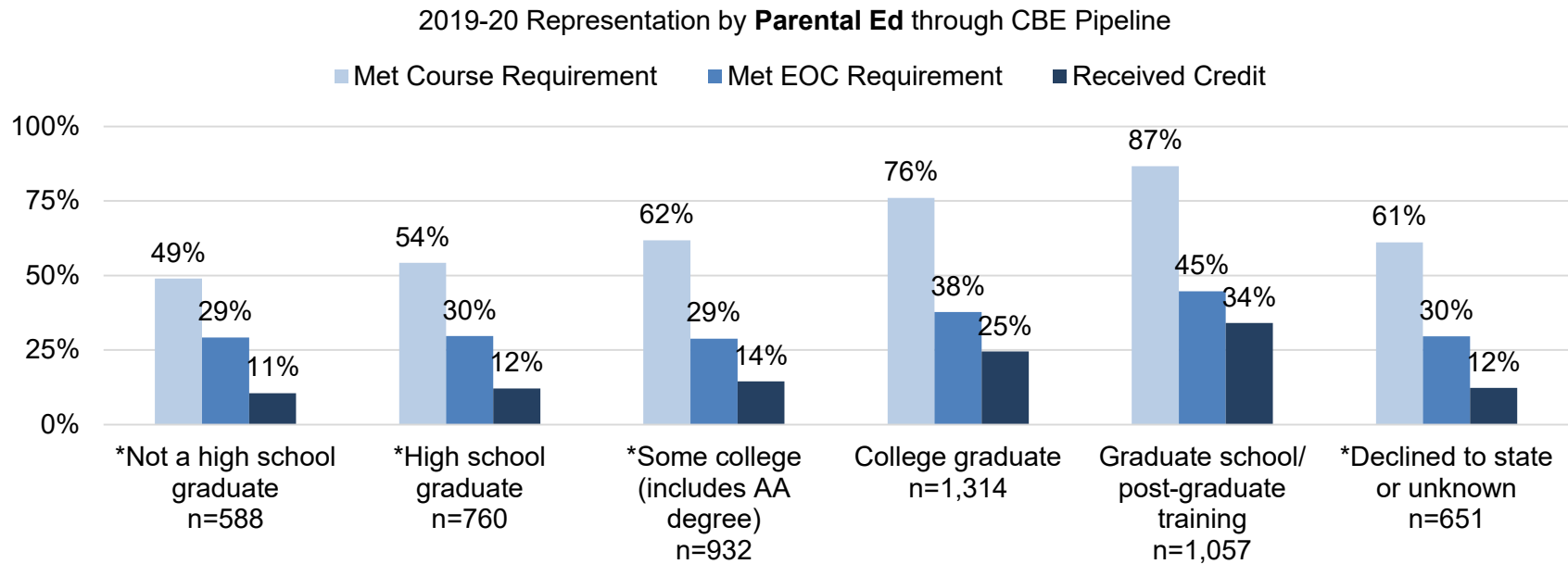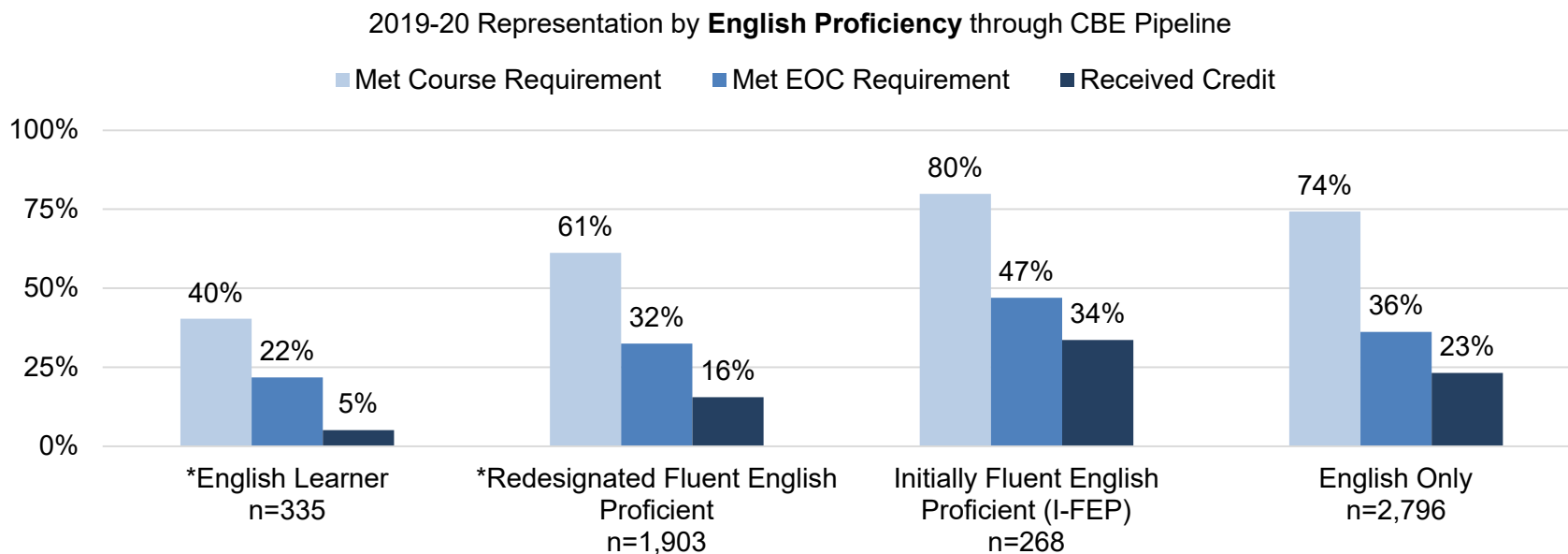■ Met Course Requirement   ■ Met EOC Requirement   ■ Received Credit

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

2019-20 CBE CTE by English Proficiency, SDUSD, Counts

	Enrolled	Met Course Requirement	Met EOC Requirement	Received Credit	Eligible, No Credit (Met EOC Req. minus Received Credit)
English Learner	335	135	73	17	*56*
Redesignated Fluent English Proficient	1,903	1,164	618	295	*323*
Initially Fluent English Proficient (I-FEP)	268	214	126	90	*36*
English Only	2,796	2,076	1,012	649	*363*
Total	**5,302**	**3,589**	**1,829**	**1,051**	*778*

Appendix I
Figure 20. SDCCD Enrollments of CTE Transitions SDCCD enrollees

SDCCD Enrollments of 2017 SDUSD High School Grads

Subject	Enrollments	% of Total
MATH	442	15%
ENGL	362	12%
CHEM	171	6%
HIST	158	5%
ARTF	146	5%
BIOL	134	4%
COMS	120	4%
PSYC	118	4%
EXSC	98	3%
PERG	79	3%
All Other	1,169	39%
Total	**2,996**	**100%**

SDCCD Enrollments of 2018 SDUSD High School Grads

Subject	Enrollments	% of Total
MATH	518	14%
ENGL	430	12%
HIST	183	5%
CHEM	179	5%
ARTF	160	4%
BIOL	158	4%
PSYC	142	4%
COMS	133	4%
PERG	133	4%
EXSC	132	4%
All Other	1,419	40%
Total	**3,587**	**100%**

SDCCD Enrollments of 2019 SDUSD High School Grads

Subject	Enrollments	% of Total
ENGL	354	16%
MATH	295	14%
PERG	156	7%
CHEM	141	7%
EXSC	115	5%
COMS	97	4%
PSYC	90	4%
ARTF	88	4%
BIOL	88	4%
HIST	77	4%
All Other	658	30%
Total	**2,159**	**100%**

Appendix J

Figure 21. HS CTE Pathway to College Course Crosswalk, with SDCCD Related Subjects

HS CTE Pathway	CBE-eligible CTE Course	Related SDCCD Subjects
Architecture Design	ENGN130	ARCH, BCAS, BLDC, CNCT, ENGE, ENDT, SUST, HMID, ARCH
Business and Finance	CBTE101	ACCT, BANK, BUSE, BUSN, ECON, MARK, REAL, OFSY, ACCT,
	CBTE120	
	BUSE157	
	CBTE161	
	CBTE162	
	CBTE170	
Child Development	CHIL160	CHIL, EDUC, HMDV, CHIL
	CHIL161	
	CHIL270	
Design Visual and Media Arts	ARTG125	CBTE, ARTF, ARTG, ARTS, ARTX, COMM, COMS, DFLM, DJRN, GRFX, MULT, PHOT, FASH, CBTE, INTE
	PHOT143	
	MULT121	
	MULT122	
	MULT123	
Education	EDUC200	CHIL, EDUC, HMDV, CHIL
	EDUC203	
Engineering Technology	MACT140	BCAS, BLDC, ARCH, CNCT, ELCT, ELDT, ELRN, ENGE, INDT, SUST, BCAS
	ENGN130	
Food Service & Hospitality	CACM101	CACM, FDNT, HOSP, MARK, CACM
	CACM105	
	HOSP101	
Graphic Production Technologies	ENGE101	CBTE, ARTF, ARTG, ARTS, ARTX, COMM, COMS, DFLM, DJRN, GRFX, MULT, PHOT, CBTE
	PHOT143	
	MULT101	
	MULT120	

Appendix J Continued

HS CTE Pathway	CBE-eligible CTE Course	Related SDCCD Subjects
Legal Practices Public Safety and Emergency Response	FIPT101	ADJU, EMGM, FIPT, HSEC, LAWS, PARA, ADJU
Machining & Forming Technologies	ENGE101	BCAS, INDT, MACT, MFET, ENGE, ENGN, MECT, ARCH, CNCT, ELDT, RTVF, BCAS
Patient Care and Biotechnology	BIOL131	BIOL, CHEM, DENA, HEAL, HEIT, HIMS, HLTH, MECT, MEDA, MLTT, NRSE, PHYR, RADT, BIOL
Production and Managerial Arts	RTVF146	RTVF, DFLM, DJRN, GRFX, MULT, PHOT, COMM, COMS, RTVF
Software and Systems Development	GISG110	CISC, CBTE, COMP, GISG, INWT, WEBD, CISC
	MULT101	
	MULT120	

Appendix K

Table 14. 2019-20 Received College Credit Rate (out of those Eligible) by High School

Sorted by count of Enrollments
SDUSD Priority High Schools highlighted in yellow.
Schools where less than 50% of eligible students received credit highlighted in red.

	Enrolled	Eligible for Credit	Received Credit	Of Total, % Eligible for Credit	Of Eligible, % That Received Credit
Scripps Ranch High	584	321	238	55%	74%
Kearny High School	505	119	45	24%	38%
Henry High	500	244	167	49%	68%
Mira Mesa High	369	56	35	15%	63%
San Diego High School	361	86	25	24%	29%
University City High	339	104	88	31%	85%
Hoover High	**314**	**136**	**42**	**43%**	31%
Serra High	307	93	29	30%	31%
Clairemont High	280	91	64	33%	70%
Mission Bay High	266	57	33	21%	58%
Point Loma High	265	75	67	28%	89%
Morse High	**258**	**102**	**64**	**40%**	63%
Twain High	186	86	18	46%	21%
Garfield High	169	38	24	22%	63%
Lincoln High	**147**	**91**	**38**	**62%**	42%
La Jolla High	144	37	34	26%	92%
San Diego SCPA	123	64	25	52%	39%
Madison High	114	22	14	19%	64%
Crawford High	**57**	**0**	**0**	**0%**	---
Mt. Everest Academy	14	7	1	50%	14%
Total	**5,302**	**1,829**	**1,051**	**34%**	**57%**

SDCCD Office of Institutional Research and Planning

Appendix L

Table 15. 2019-20 Received College Credit Rate (out of those Eligible) by Subject of College Course

Sorted by count of Enrollments
2019-20 Received College Credit Rate (out of those Eligible) by Subject of College Course. Sorted by count of Enrollments
Subjects in which less than 50% of eligible students received credit highlighted in red.

	Enrolled	Eligible for Credit	Received Credit	Of Total, % Eligible for Credit	Of Eligible, % That Received Credit
Engineering (ENGE)	1,880	788	593	42%	75%
Art-Graphic Design (ARTG)	708	23	2	3%	9%
Multimedia Arts (MULT)	559	283	98	51%	35%
Biology (BIOL)	392	102	82	26%	80%
Culinary Arts/Mgmt (CACM)	384	140	44	36%	31%
Radio, Television and Film (RTVF)	371	68	33	18%	49%
Child Development (CHIL)	332	167	96	50%	57%
Machine Technology (MACT)	164	0	0	0%	---
Compute Business Technology (CBTE)	145	75	16	52%	21%
Education (EDUC)	127	74	51	58%	69%
Photography (PHOT)	112	50	23	45%	46%
Geographic Information Systems (GISG)	82	23	13	28%	57%
Fire Protection (FIPT)	46	36	0	78%	0%
Total	**5,302**	**1,829**	**1,051**	**34%**	**57%**