



Tech Prep Annual Report

2007/08

Prepared by:
Institutional Research and Planning

February 2009

TABLE OF CONTENTS

TABLE OF CONTENTS	2
INTRODUCTION	3
DATA AND ANALYSIS	3
RESULTS	5
Student Enrollment.....	5
Student Profile.....	6
Demographic Characteristics	6
EOPS and DSPS Services.....	8
Top 20 Declared Majors.....	9
English and Math Course-Taking Behaviors	11
Student Outcomes.....	13
Units Enrolled.....	13
Academic Performance	13
Retention Rates and Term Persistence	15
Transfer to a 4-Year Institution.....	16
Degrees and Certificates Awarded	16
SUMMARY AND CONCLUSIONS.....	18

INTRODUCTION

The San Diego Community College District (SDCCD) operates the tech prep program with its high school feeders in order to prepare students for community college and facilitate their transition to the district. The program awards college credit to students taking pre-approved courses at their high school. This study was designed to examine 3 cohorts of high school students who participated in the tech prep program in their senior year (04/05, 05/06, 06/07) in the following areas: (1) the number of tech prep participants who participated in the tech prep program in their senior year, those who enrolled at SDCCD the following term, and their enrollment distribution among the SDCCD colleges; (2) a student profile of the tech prep participants who enrolled at SDCCD; and (3) their performance at SDCCD. Additionally, the study was designed to follow one cohort of 03/04 high school students who participated in the tech prep program in their senior year and subsequently enrolled in SDCCD in Fall 2004 through 4 years of their postsecondary education. The purpose was to examine certificate/degree completion and transfer status.

DATA AND ANALYSIS

The tech prep participant cohorts included students in the feeder high schools of SDCCD who participated in the tech prep program in their senior year and enrolled at SDCCD the following fall term. Four cohorts were measured, including students who enrolled in Fall 2004, 2005, 2006 and 2007. Those students who graduated high school in 06/07 and enrolled at SDCCD in Fall 2007 were the most recent cohort available and therefore the latest year studied. Where useful, tech prep student cohorts were compared to a relative group of SDCCD students. The comparison group cohorts were made up of other SDCCD students who had just completed high school, but did not participate in tech prep. Comparison group students met the following criteria in the fall term following their high school graduation:

- Graduated from high school in the academic year prior to SDCCD enrollment
- Age 17-21
- First time enrollment status
- Received a high school diploma, passed GED/received certificate, or received CA high school proficiency.

Tech prep participants were identified by the tech prep coordinator via Tech Prep CATHEMA database and subsequently matched to student records at SDCCD. High school performance was provided directly to SDCCD Information Systems by tech prep staff. In some cases, reporting to staff on the qualifying tech prep classes was delayed and, therefore, don't appear in the student's record until the following fall term and consequently may be included in the fall term GPA and units enrolled. Data for tech prep students and the comparison group were generated by SDCCD Information Systems, and comprised demographic and college student outcomes performance data. The National Student Clearinghouse provided 4-year university transfer data.

Enrollment, student profile, academic standing, GPA, units earned, successful course completion, retention, and persistence were calculated for Fall 05, Fall 06, and Fall 07 terms. Certificate/degree awards and transfer rates were calculated using a Fall 04 student cohort that was tracked through their postsecondary education and measured at the completion of the 04/05, 05/06, 06/07, and 07/08 academic years.

All data were presented for students enrolled as of census. The majority of the data were presented district wide, comprising City, Mesa, Miramar and ECC as a single unit. Enrollment data were presented individually for each college and overall by all colleges. ECC students were included in the City College data. College affiliation was determined on a course by course basis by the college offering the course. Please note that because students may have taken classes at multiple colleges, summed college totals may not match the All College total. Additionally, some percentages may not total 100% due to rounding.

Several of the measures used in this report warrant description.

- *Census Enrollments OR Valid Enrollment* - All students who are enrolled as of census day (excludes students who dropped or never attended prior to census day but includes students who may have withdrawn after census day). Valid enrollment is characterized or marked by the week nearest to 20% of the total number of weeks in the primary term and generally the Monday of census week.
- *Tech Prep Enrollment Rate* – The number of tech prep college-enrolled students divided by the number of tech prep graduating high school students.
- *Retention Rate* - The percentage of students who complete a course with a grade of A, B, C, D, F, CR, NC, I or RD out of total census enrollments. Tutoring courses are excluded from the analysis.
- *Success Rate* - The percentage of students who complete a course with a grade of A, B, C, or CR out of total census enrollments. Tutoring courses are excluded from the analysis.
- *Term GPA* – At term completion, course grades, with A=4, B=3, C=2, D=1, and F=0, are multiplied by corresponding course units, summed, and then divided by the maximum sum of possible graded term units.
- *Persistence* - The percentage of census enrolled students in a fall term who received a grade notation of A, B, C, D, F, CR, NC, I or RD (cohort) and who subsequently enrolled in at least one course in the spring term and received a grade notation of A, B, C, D, F, CR, NC, I or RD.

RESULTS

Student Enrollment

There were a total of 769 tech prep participants in 04/05, 685 in 05/06 and 935 in 06/07 (see Table 1). Please note that the 06/07 tech prep high school graduation count is larger than in previous years due to a change in tech prep student accounting and not necessarily due to an increased participation in the tech prep program. In previous years only students who earned credit for courses and procedurally had them successfully applied to their transcripts were included in the tech prep participant list, while in 06/07 all students who earned credit (including students who did not earn credit on their transcripts due to application problems) were included in the tech prep participant list. Direct enrollment in a SDCCD college has declined over three years: 231 (30%) enrolled in Fall 05, 172 (25%) enrolled in Fall 06, and 196 (21%) enrolled in Fall 07. From Fall 05 to Fall 07 City College has consistently enrolled the largest percentage of tech prep students (14% in Fall 05, 12% in Fall 06, and 11% in Fall 07).

Note that data were available only for those tech prep students who were included in the CATEMA database list and who enrolled in SDCCD. Therefore, the tech prep students that did not subsequently enroll in SDCCD are excluded from the remainder of the analyses.

Table 1. Tech Prep Student Enrollment in Fall Term Following Graduation

	2004-05 H.S. Grad (N=769) Enrolled in Fall 05		2005-06 H.S. Grad (N=685) Enrolled in Fall 06		2006-07 H.S. Grad (N=935) Enrolled in Fall 07		3-Year Total/Average	
	Count	Enroll Rate	Count	Enroll Rate	Count	Enroll Rate	Count	Enroll Rate
City College	106	14%	84	12%	107	11%	297	12%
Mesa College	90	12%	77	11%	69	7%	236	10%
Miramar College	48	6%	30	4%	31	3%	109	5%
All Colleges	231	30%	172	25%	196	21%	599	25%

Source: SDCCD Information System and Tech Prep CATEMA DB

Note: Students may take courses at multiple colleges; therefore, summed individual College enrollment may not total All College enrollment.

From Fall 05 to Fall 07, on average, the enrollment distribution of tech prep students and comparison group students across SDCCD colleges shows that half of all tech prep students who enrolled at SDCCD, enrolled at City College (50%). However, the largest proportion of comparison group students enrolled at Mesa College during the same time frame (48%; see Table 2). From Fall 05 to Fall 07, on average, the enrollment distribution of tech prep students across SDCCD colleges shows that tech prep student enrollment at City College has increased from Fall 05 to Fall 07 (46%-55%), while tech prep student enrollment at Miramar college has declined from Fall 05 to Fall 07 (21%-16%). Mesa College tech prep enrollment ranged from 39%-35% from Fall 05 to Fall 07.

Table 2. Enrollment Distribution Across Colleges Among Tech Prep Students and Comparison Group

	Fall 05				Fall 06				Fall 07				3-Year Total/Average			
	Tech Prep		Comparison Group		Tech Prep		Comparison Group		Tech Prep		Comparison Group		Tech Prep		Comparison Group	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
City College	106	46%	816	36%	84	49%	1,144	38%	107	55%	1,157	38%	297	50%	3,117	38%
Mesa College	90	39%	1,047	46%	77	45%	1,468	49%	69	35%	1,437	47%	236	39%	3,952	48%
Miramar College	48	21%	507	22%	30	17%	536	18%	31	16%	597	20%	109	18%	1,640	20%
All Colleges	231	100%	2,255	100%	172	100%	2,997	100%	196	100%	3,040	100%	599	100%	8,292	100%

Source: SDCCD Information System and Tech Prep CATEMA DB

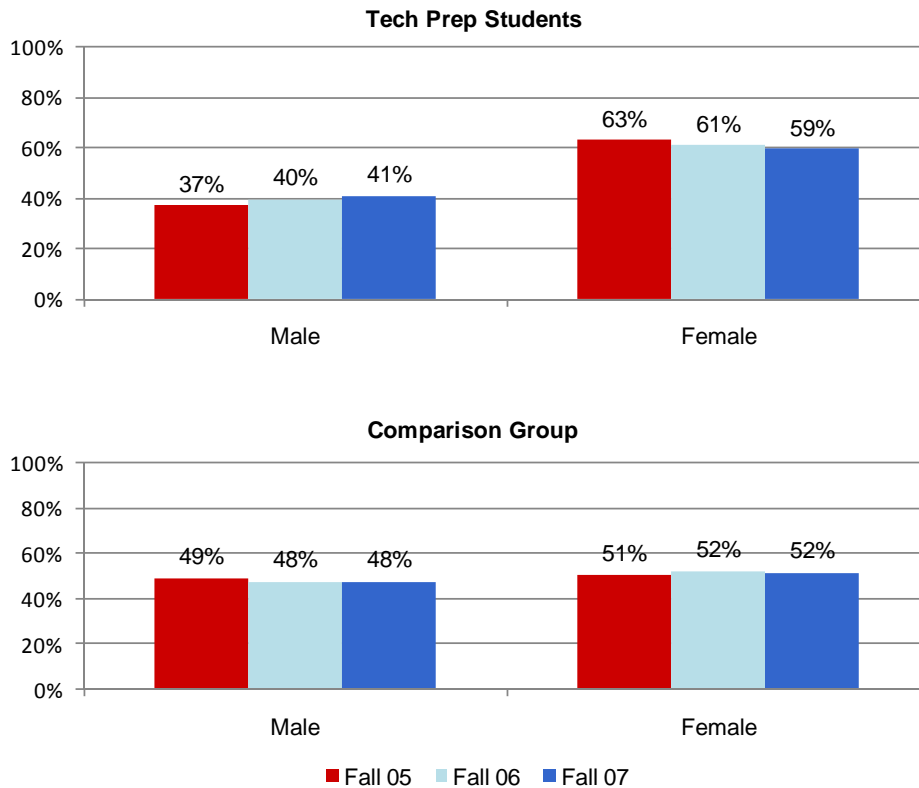
Note: Students may take courses at multiple colleges; therefore, summed individual College enrollment may not total All College enrollment.

Student Profile

Demographic Characteristics

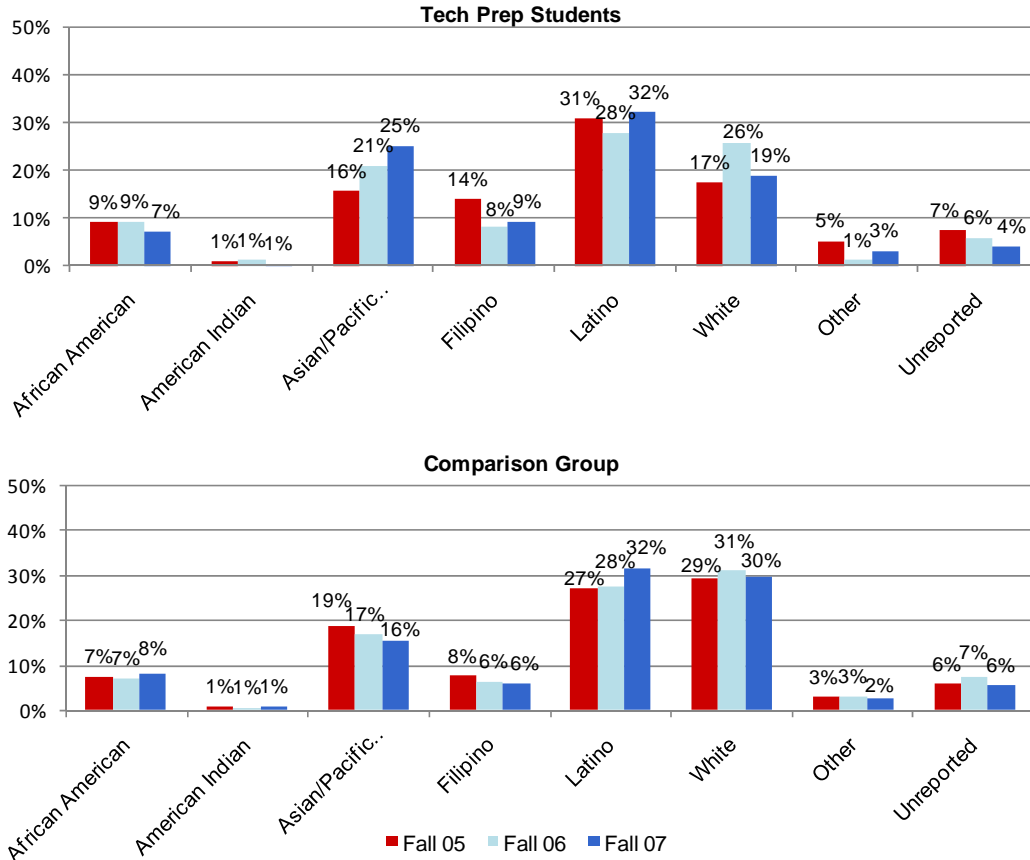
A number of demographic characteristics were assessed in the tech prep and comparison group student profiles, including gender, ethnicity, primary language and annual family income. From Fall 05 to Fall 07, tech prep participants were more likely to be female (63%, 61% and 59% respectively) than were students in the comparison group (51%, 52%, and 52%; see Figure 1).

Figure 1. Gender



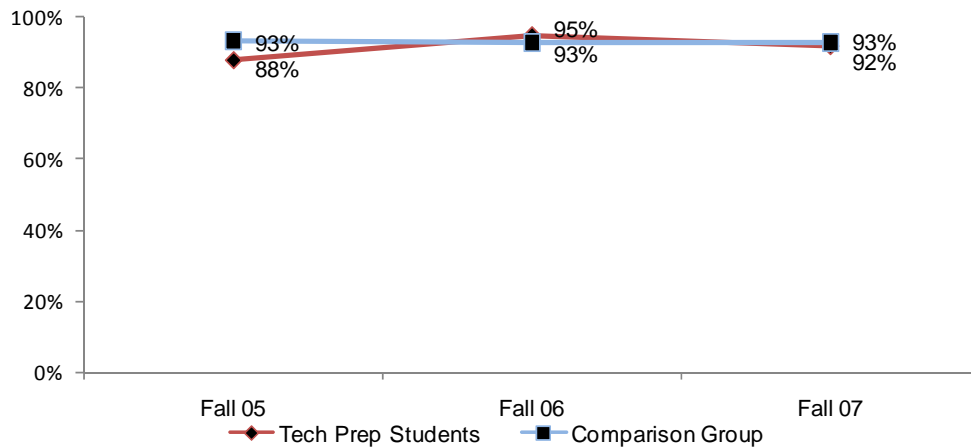
Overall, the tech prep group comprised a larger population of Asian/Pacific Islanders and Filipinos, and a smaller population of White students than the comparison group (see Figure 2). Over the three years, Asian/Pacific Islanders comprised an increasing population in the tech prep group and a decreasing population in the comparison group (16%-25% for tech prep students vs. 19%-16% for comparison group). From Fall 05 to Fall 07 the Latino population continued to make up a large proportion of both the tech prep and comparison student groups.

Figure 2. Ethnicity



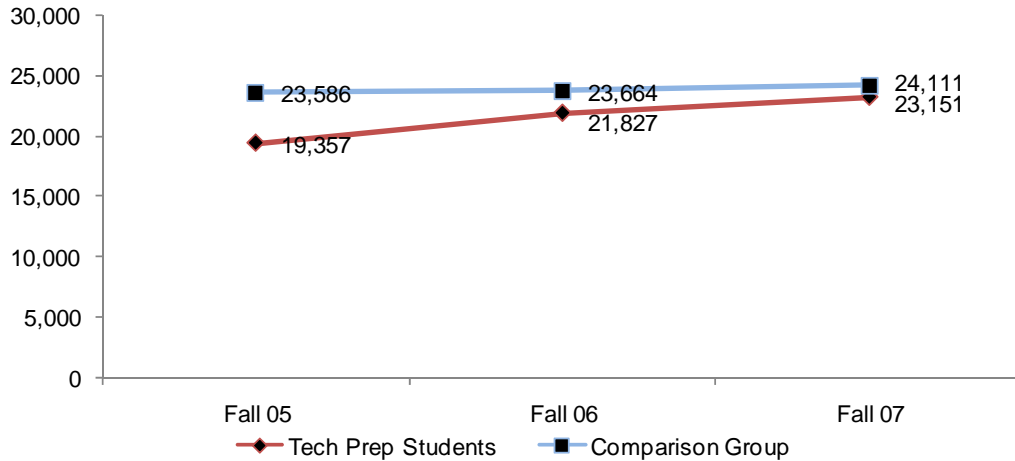
Overall, the tech prep population looked much like the other recent high school graduates in terms of primary language used at home (see Figure 3). However, the comparison group’s primary language spoken at home remained relatively steady, at 93% English speaking, from Fall 05 to Fall 07, while the tech prep population varied somewhat (88% in Fall 05, 95% in Fall 06 and 92% in Fall 07).

Figure 3. English as Primary Language Spoken at Home



Tech prep participants consistently reported a lower mean annual family income than the comparison group from Fall 05 to Fall 07 (see Figure 4). Nevertheless, the tech prep annual family income increased at a greater rate than the comparison group from Fall 05 to Fall 07 (20% increase for tech prep students vs. 2% increase for comparison group).

Figure 4. Mean Annual Family Income



EOPS and DSPS Services

The EOPS and DSPS status of the tech prep and comparison students were also examined. Figure 5 shows that tech prep students were more likely to receive EOPS services than the comparison group, though participation in EOPS declined from Fall 05 to Fall 07 (12%, 11%, and 8% respectively for tech prep vs. 4%, 3% and 4% respectively for comparison group). Figure 6 reveals that from Fall 05 to Fall 07, tech prep and comparison students did not differ in the likelihood of receiving DSPS services (1%, 1%, and 2% respectively for tech prep vs. 3%, 2% and 2% respectively for comparison group).

Figure 5. EOPS Services Received

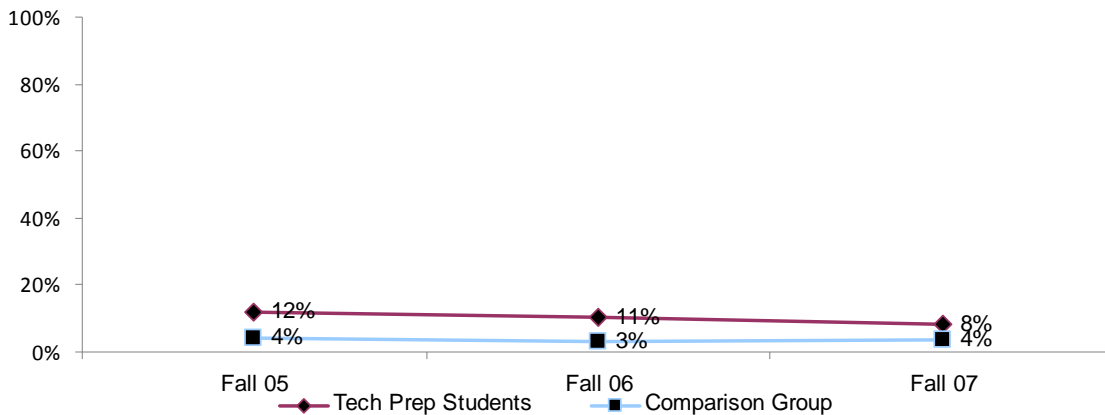
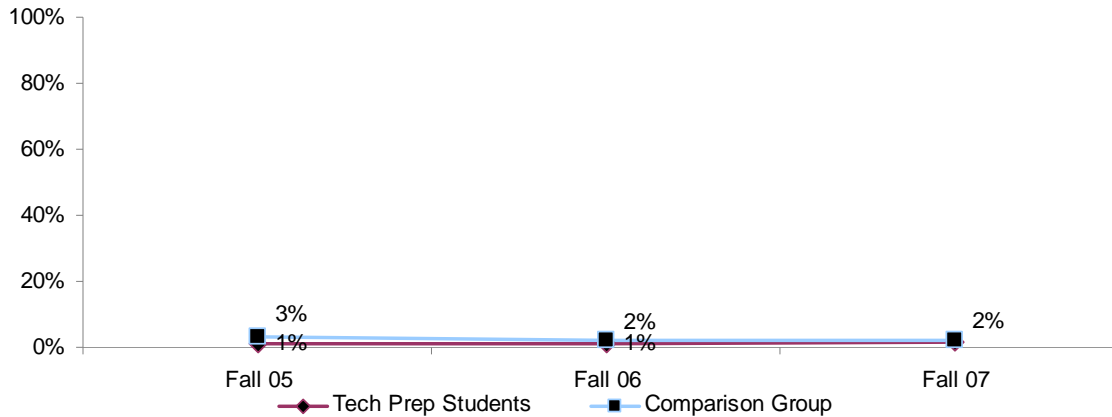


Figure 6. DSPS Services Received



Top 20 Declared Majors

Table 3a, 3b and 3c show the top 20 majors declared by first term tech prep students and comparison group students in Fall 05, Fall 06 and Fall 07. In each of the years, the largest proportion of both tech prep students and comparison group students were those that were undeclared or unclassified (40%, 34% and 38% respectively for tech prep students vs. 33%, 33% and 32% respectively for comparison students).

Table 3a. Top 20 Majors Declared by First-Term Students - Fall 2005

Tech Prep Students			Comparison Group		
Major	Count	Percent	Major	Count	Percent
199 UNDECLARED OR UNCLASS A&S	91	39.4%	199 UNDECLARED OR UNCLASS A&S	744	33%
046 TRANSFER	17	7.4%	298 BUSINESS	213	9.4%
298 BUSINESS	14	6.1%	046 TRANSFER	160	7.1%
198 UNCLASS RESTRICTED TECH PROG	10	4.3%	111 BIOLOGY	115	5.1%
999 UNREPORTED	10	4.3%	239 ENGINEERING	92	4.1%
111 BIOLOGY	9	3.9%	159 PSYCHOLOGY	88	3.9%
159 PSYCHOLOGY	8	3.5%	198 UNCLASS RESTRICTED TECH PROG	68	3%
340 CHILD DEVELOPMENT	8	3.5%	999 UNREPORTED	52	2.3%
200 ACCOUNTING	5	2.2%	340 CHILD DEVELOPMENT	42	1.9%
217 COMPUTER/INFORMATION SCIENCE	4	1.7%	156 PHYS SCIENCE-CHEMISTRY	40	1.8%
564 BEHAVIORAL SCI-SOCIAL WORK	4	1.7%	584 FIRE PROTECTION TECHNOLOGY	39	1.7%
639 TRANSFER STUDIES	4	1.7%	217 COMPUTER/INFORMATION SCIENCE	30	1.3%
230 FASHION	3	1.3%	104 ART-FINE ART	29	1.3%
542 VIS & PERF ART-ART GRAPHIC DES	3	1.3%	542 VIS & PERF ART-ART GRAPHIC DES	24	1.1%
047 LIBERAL ARTS	2	0.9%	047 LIBERAL ARTS	23	1%
049 ELEC TECH - ELECTRONIC SYSTEM	2	0.9%	183 SOCIAL SCIENCE-POLITICAL SCI	22	1%
075 LEGAL ASSISTANT	2	0.9%	324 ARCHITECTURE	22	1%
105 DRAMATIC ARTS	2	0.9%	320 AUTOMOTIVE TECHNOLOGY	20	0.9%
110 ENGLISH	2	0.9%	145 MATHEMATICS	19	0.8%
170 SOCIAL SCIENCES	2	0.9%	200 ACCOUNTING	19	0.8%

Source: SDCCD Information System and Tech Prep CATEMA DB

2007/08 Annual Tech Prep Report

Table 3b. Top 20 Majors Declared by First-Term Students - Fall 2006

Tech Prep Students			Comparison Group		
Major	Count	Percent	Major	Count	Percent
199 UNDECLARED OR UNCLASS A&S	58	33.7%	199 UNDECLARED OR UNCLASS A&S	994	33.2%
298 BUSINESS	13	7.6%	298 BUSINESS	323	10.8%
340 CHILD DEVELOPMENT	10	5.8%	111 BIOLOGY	184	6.1%
111 BIOLOGY	8	4.7%	046 TRANSFER	148	4.9%
159 PSYCHOLOGY	8	4.7%	239 ENGINEERING	130	4.3%
046 TRANSFER	6	3.5%	159 PSYCHOLOGY	108	3.6%
198 UNCLASS RESTRICTED TECH PROG	5	2.9%	198 UNCLASS RESTRICTED TECH PROG	103	3.4%
217 COMPUTER/INFORMATION SCIENCE	5	2.9%	104 ART-FINE ART	43	1.4%
239 ENGINEERING	5	2.9%	183 SOCIAL SCIENCE-POLITICAL SCI	43	1.4%
200 ACCOUNTING	4	2.3%	156 PHYS SCIENCE-CHEMISTRY	42	1.4%
324 ARCHITECTURE	4	2.3%	542 VIS & PERF ART-ART GRAPHIC DES	41	1.4%
230 FASHION	3	1.7%	217 COMPUTER/INFORMATION SCIENCE	38	1.3%
564 BEHAVIORAL SCI-SOCIAL WORK	3	1.7%	047 LIBERAL ARTS	37	1.2%
047 LIBERAL ARTS	2	1.2%	200 ACCOUNTING	34	1.1%
104 ART-FINE ART	2	1.2%	324 ARCHITECTURE	34	1.1%
145 MATHEMATICS	2	1.2%	445 ADMINISTRATION OF JUSTICE	33	1.1%
170 SOCIAL SCIENCES	2	1.2%	631 TRANSFER STUDIES CSU	32	1.1%
255 REAL ESTATE	2	1.2%	584 FIRE PROTECTION TECHNOLOGY	31	1%
306 AVIATION OCCUPATIONS	2	1.2%	145 MATHEMATICS	30	1%
329 ADMIN OF JUST-LAW ENFORCEMENT	2	1.2%	110 ENGLISH	28	0.9%

Source: SDCCD Information System and Tech Prep CATEMA DB

Table 3c. Top 20 Majors Declared by First-Term Students - Fall 2007

Tech Prep Students			Comparison Group		
Major	Count	Percent	Major	Count	Percent
199 UNDECLARED OR UNCLASS A&S	75	38.3%	199 UNDECLARED OR UNCLASS A&S	979	32.2%
198 UNCLASS RESTRICTED TECH PROG	15	7.7%	111 BIOLOGY	195	6.4%
111 BIOLOGY	12	6.1%	206 BUSINESS ADMINISTRATION	146	4.8%
340 CHILD DEVELOPMENT	12	6.1%	198 UNCLASS RESTRICTED TECH PROG	142	4.7%
159 PSYCHOLOGY	9	4.6%	159 PSYCHOLOGY	126	4.1%
239 ENGINEERING	6	3.1%	239 ENGINEERING	118	3.9%
206 BUSINESS ADMINISTRATION	5	2.6%	046 TRANSFER	85	2.8%
542 VIS & PERF ART-ART GRAPHIC DES	5	2.6%	569 BUS STUDIES SDSU BUSINESS ADM	85	2.8%
200 ACCOUNTING	4	2%	340 CHILD DEVELOPMENT	59	1.9%
150 MUSIC	3	1.5%	104 ART-FINE ART	52	1.7%
564 BEHAVIORAL SCI-SOCIAL WORK	3	1.5%	047 LIBERAL ARTS	45	1.5%
571 BUS STUDIES SMALL BUS MGMT	3	1.5%	541 POLITICAL SCIENCE	45	1.5%
046 TRANSFER	2	1%	156 PHYS SCIENCE-CHEMISTRY	44	1.4%
155 PHYSICAL SCIENCE	2	1%	150 MUSIC	42	1.4%
217 COMPUTER/INFORMATION SCIENCE	2	1%	217 COMPUTER/INFORMATION SCIENCE	41	1.3%
298 BUSINESS	2	1%	571 BUS STUDIES SMALL BUS MGMT	41	1.3%
324 ARCHITECTURE	2	1%	324 ARCHITECTURE	37	1.2%
347 INTERIOR DESIGN	2	1%	542 VIS & PERF ART-ART GRAPHIC DES	33	1.1%
445 ADMINISTRATION OF JUSTICE	2	1%	584 FIRE PROTECTION TECHNOLOGY	33	1.1%
557 COMM RTV-RADIO	2	1%	639 TRANSFER STUDIES	30	1%

Source: SDCCD Information System and Tech Prep CATEMA DB

English and Math Course-Taking Behaviors

First-term math and English course-taking behaviors were examined at the basic skills, associate and transfer levels. From Fall 05 to Fall 07 a math course was considered basic skills if it had a course number below 95, associate level if it had a course number 95 or 96, and transfer level if it had a course number higher than 96. During the same period of time, an English course was considered basic skills if it had a course number below 51, associate level if it had a course number higher than 51 and less than 101, and transfer level if it had a course number 101 or higher.

Figure 7 shows the percent of tech prep students and comparison group students who did and did not take math courses in their first semester by skill level. The percentage of both tech prep (41%-32%) and comparison group students (58%-45%) who chose not to take a math course in their first semester decreased from Fall 05 to Fall 07. However, a greater percentage of comparison group students chose not to take a math course in their first semester than did tech prep students. From Fall 05 to Fall 07 both the tech prep and comparison group students most frequently took basic skills courses, followed secondly by associate level courses, and lastly by transfer level courses. The number of students who enrolled in basic skills math courses increased among both tech prep and comparison students across three years (35%-45% for tech prep students and 24%-31% for comparison students). The number of students who took associate level courses decreased among tech prep students (22%-16%) and increased among comparison group students (15%-18%) across three years.

Figure 7. Math Courses Taken by First-Term Students

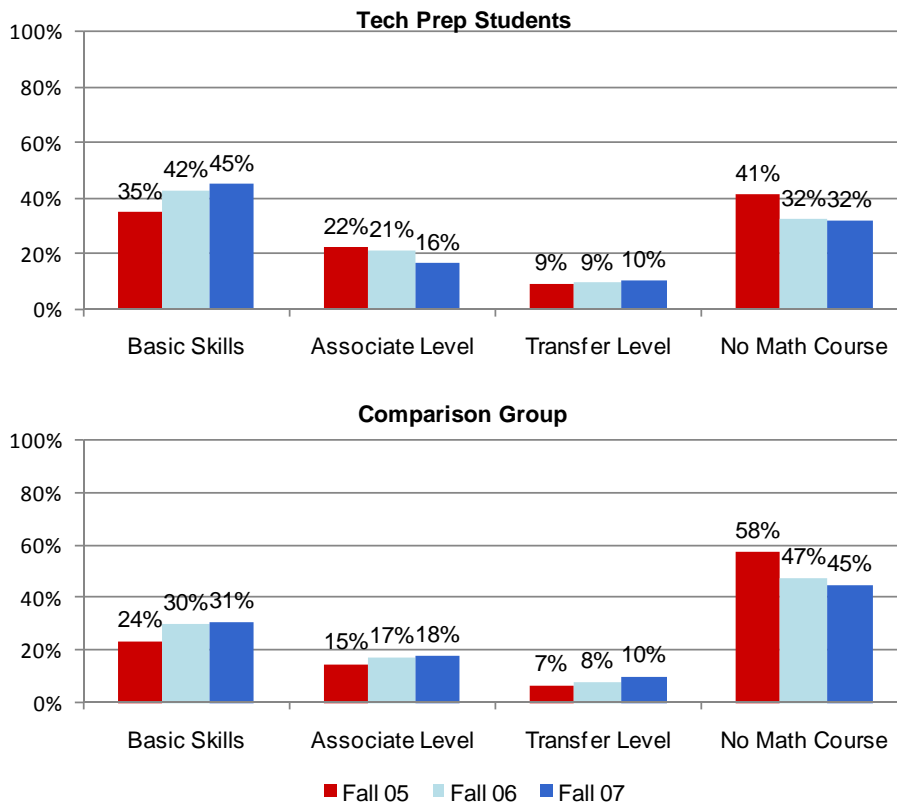
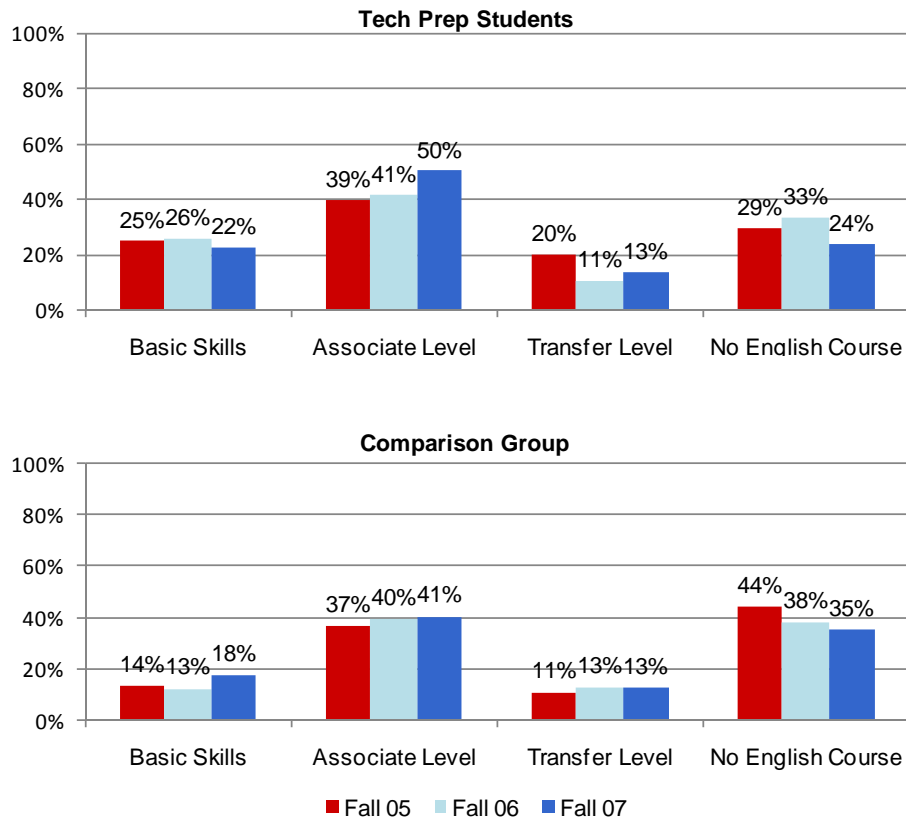


Figure 8 shows the percent of tech prep students and comparison group students who did and did not take an English course in their first semester by skill level. Overall, the number of both tech prep (29%-24%) and comparison group students (44%-35%) who chose not to take an English course in their first semester decreased from Fall 05 to Fall 07. However, a greater percentage of comparison group students chose not to take an English course in their first semester than did tech prep students. From Fall 05 to Fall 07 both the tech prep students and comparison group students most frequently took associate level English courses, followed secondly by basic skills level English courses, and lastly by transfer level English courses. Within each course level, tech prep and comparison students showed marked differences in course taking behaviors over time. From Fall 05 to Fall 07 an increasing number of both tech prep and comparison students took associate level courses (39%-50% for tech prep students and 37%-41% for comparison students). A decreasing number of tech prep students took basic skills (25%-22%) and transfer level courses (20%-13%); while an increasing number of comparison students took basic skills (14%-18%) and transfer level courses (11%-13%).

Figure 8. English Courses Taken by First-Term Students

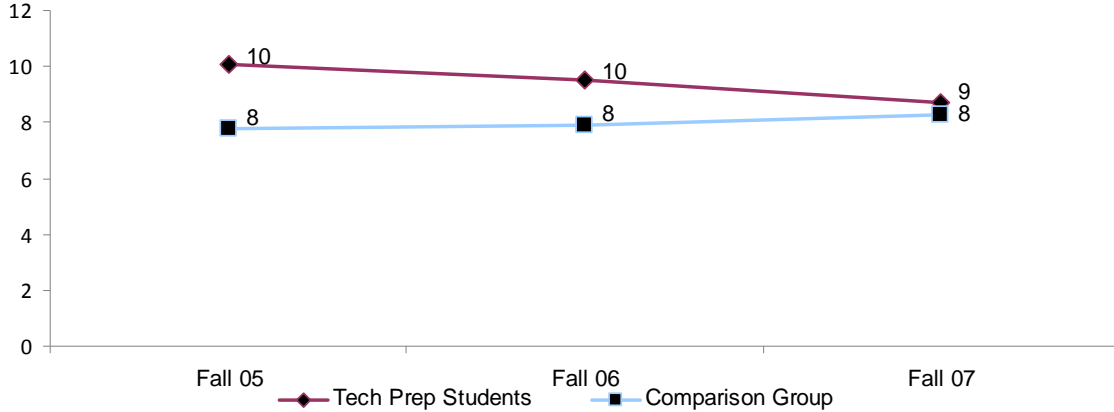


Student Outcomes

Units Enrolled

Tech prep student outcomes were measured in a number of ways, including the number of units in which the student was enrolled at SDCCD in the term following their graduation from high school. Figure 9 shows that tech prep students enrolled in an average of 2 units more than did the comparison students in Fall 05 and Fall 06 and in an average of 1 unit more than comparison students in Fall 07.

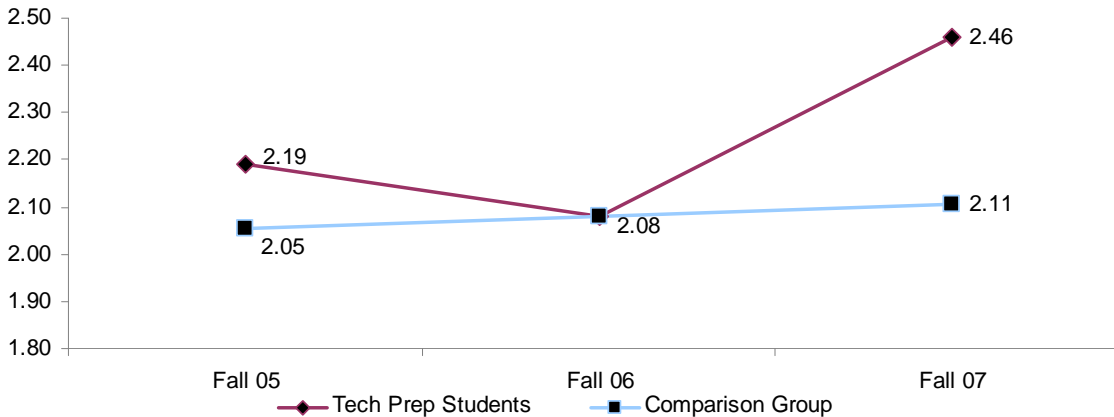
Figure 9. Average Units Enrolled



Academic Performance

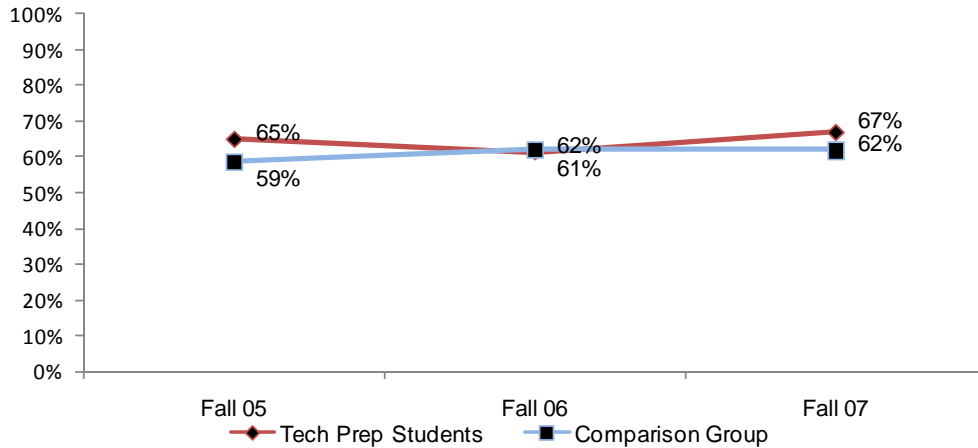
Academic performance of first-term tech prep and comparison students was assessed via term GPA, successful course completion and academic standing. The average tech prep first-term GPA (see Figure 10) was higher than the average comparison student first-term GPA in Fall 05 (2.19 vs. 2.05), both had the same average GPA in Fall 06 (2.08 each), and in Fall 07 the tech prep first-term GPA increased higher than comparison students (2.46 vs. 2.11).

Figure 10. Average Term GPA



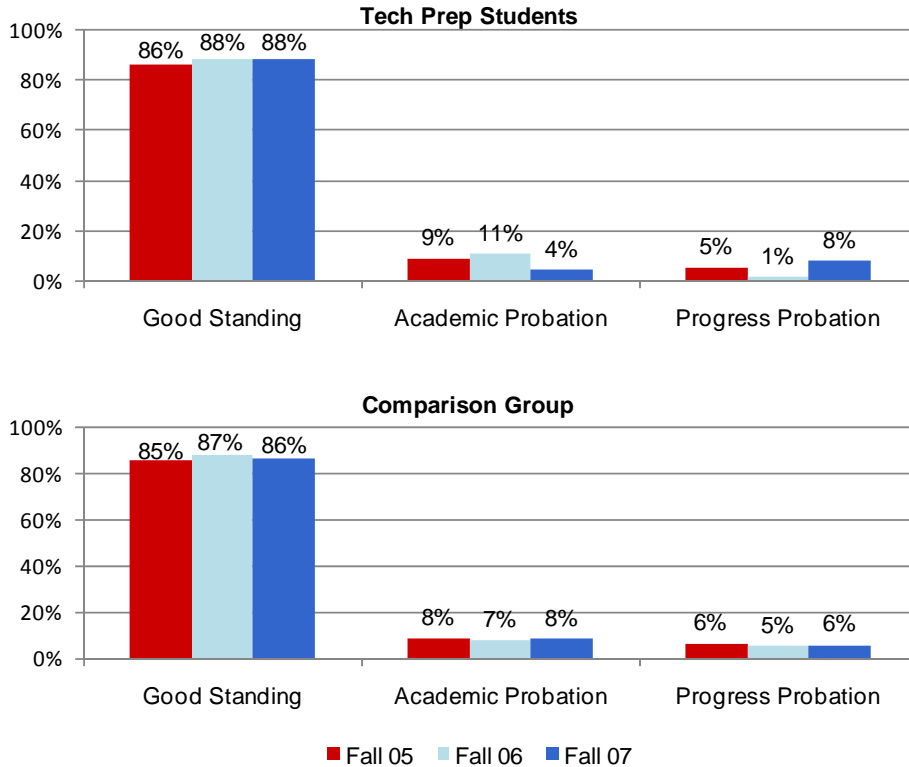
Successful course completion rates refer to completion of a course with a grade of A, B, C or credit out of total census enrollments. Figure 11 shows that with the exception of Fall 06, tech prep students generally had higher success rates (65% in Fall 05, 61% in Fall 06 and 67% in Fall 07) than did comparison students (59% in Fall 05, 62% in Fall 06 and 62% in Fall 07).

Figure 11. Successful Course Completion Rate



Academic standing is summarized in Figure 12. The figure reveals little difference between the tech prep students and the comparison group.

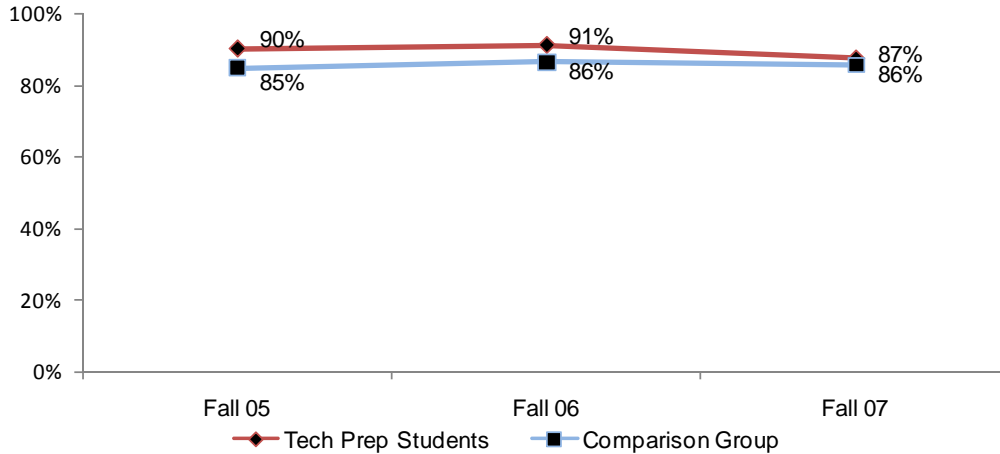
Figure 12. Academic Standing



Retention Rates and Term Persistence

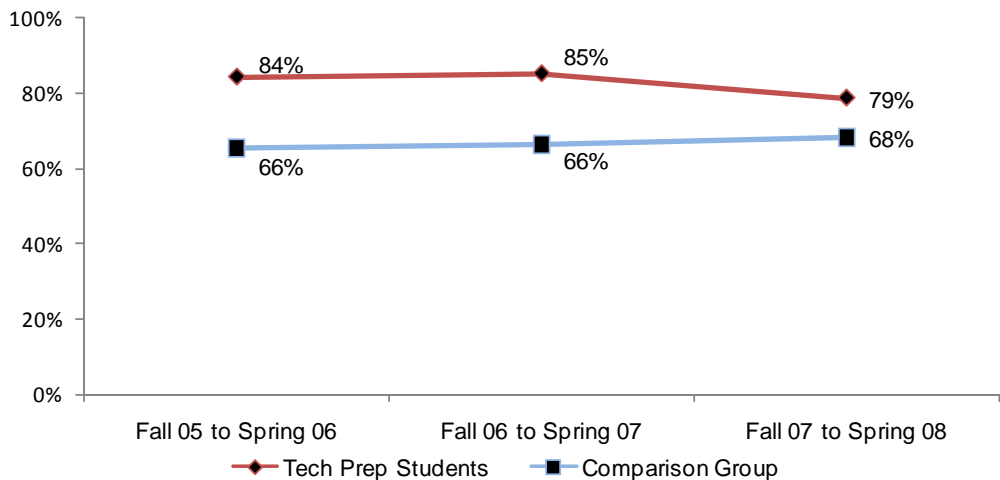
Course retention rates and term persistence rates were also examined. *Retention rates* refer to the percentage of students who complete a course with a grade of A, B, C, D, F, CR, NC, I or RD out of total census enrollments. The retention rate for tech prep students, shown in Figure 13, was higher than comparison students in Fall 05 and Fall 06 (90% and 91% respectively for tech prep vs. 85% and 86% respectively for comparison group) and about the same as the comparison students in Fall 07 (87% tech prep vs. 86% comparison group).

Figure 13. Student Retention Rate



Term Persistence rates refer to the percentage of census enrolled students in a fall term who receive a grade notation of A, B, C, D, F, CR, NC, I or RD (cohort) and who subsequently enroll in at least one course in the spring term and receive a grade notation of A, B, C, D, F, CR, NC, I or RD. Figure 14 shows that persistence did differ by group from Fall 05 to Fall 07. Persistence was higher for tech prep students (84% in Fall 05, 85% in Fall 06 and 79% in Fall 07) than comparison students (66% in Fall 05 and 06 and 68% in Fall 07) in each of the terms examined; however the difference was greatest in Fall 05 and Fall 06 terms (18% and 19% greater respectively) and declined in Fall 07 (11%).

Figure 14. Term Persistence



Transfer to a 4-Year Institution

Student transfer to a 4-year institution was assessed by tracking the Fall 04 cohort of tech prep students (N=300) and comparison students (N=2,288), enrolled at SDCCD as of census, through 2007-08. The tech prep cohort included students who were high school seniors in 2003-04 and who took a tech prep course(s) in 2003-04 and were enrolled at SDCCD as of census in Fall 04. The comparison group cohort included students who graduated from high school in 2003-04 and were enrolled at SDCCD as of census in Fall 04. Note that transfer information was not available for the entire 2007-08 academic year. Therefore, 2007-08 figures contain only transfers as of October, 2007.

Table 4 reveals that over time the Fall 04 tech prep cohort group transferred to a 4-year institution at a lower rate than the comparison cohort group (25% tech prep vs. 36% comparison group). This difference was mainly due to a lower first year transfer rate for the tech prep student cohort (9%) than the comparison group student cohort (25%). The transfer rate for tech prep students was similar to that of comparison students after their second (2% vs. 1%), third (6% vs. 5%) and fourth years at SDCCD (7% vs. 4%).

Table 4. Fall 04 Cohort Students Who Transferred to Another College within 4 Years of High School Graduation

	2004-05		2005-06		2006-07		2007-08		4-Year Total Count	4-Year Total % of Cohort
	Count	% of Cohort	Count	% of Cohort	Count	% of Cohort	Count	% of Cohort		
Tech Prep Students	27	9%	6	2%	19	6%	22	7%	74	25%
Comparison Group	566	25%	34	1%	113	5%	100	4%	813	36%

Source: SDCCD Information System, Tech Prep CATEMA DB, and National Student Clearinghouse

Degrees and Certificates Awarded

The number of students who received an award and the number of degrees and certificates awarded to students was assessed by tracking the Fall 04 cohort of tech prep (N=300) and comparison students (N=2,288), enrolled at SDCCD as of census, through 2007-08. Note that degree and certificate data for Spring 08 and Summer 08 were available; therefore, the entire 2007-08 academic year was included in the analysis.

Table 5 illustrates the number and percent of the tech prep and comparison group cohort that received a degree or certificate in the academic year specified. Results show that overall, a small proportion of both cohorts received awards by the end of the 2007-08 year. However, the Fall 04 tech prep student cohort was awarded a larger proportion of degrees/awards (11%) than the comparison group cohort (6%) by the end of the 2007-08 year.

Table 5. Fall 04 Cohort Students Who Received an Award within 4 Years of High School Graduation

	2004-05		2005-06		2006-07		2007-08		4-Year Total Count	4-Year Total % of Cohort
	Count	% of Chort	Count	% of Chort	Count	% of Chort	Count	% of Chort		
Tech Prep Students	0	0%	4	1%	12	4%	16	5%	32	11%
Comparison Group	0	0%	28	1%	66	3%	42	2%	136	6%

Source: SDCCD Information System and Tech Prep CATEMA DB

Note: 3 cells have a count less than 5.

Table 6 illustrates the distribution of degrees/certificates awarded to students. Please note that some students received more than one degree or certificate. Therefore, number of degrees and number of students do not match. While Table 5 reflects an unduplicated count of the number of students who received an award (tech prep, N=32 and comparison group N=136) out of the total Fall 04 cohort (tech prep, N=300 and comparison group N=2,288), calculations in Table 6 are based on a duplicated count of degrees/certificates earned (tech prep, N=37 and comparison group N=148) out of the total number of students who received an award (tech prep, N=32 and comparison group N=136). Note the small group counts in Table 6.

Among those in the Fall 04 cohort who received an award from 2004-05 to 2007-08, on average, the majority of both the tech prep (86%) and comparison students (80%) were awarded an AA/AS degree. During the same timeframe among students who received an award, a larger proportion of comparison students completed mini-certificates (16%) than did tech prep students (5%).

Table 6. Award Distribution Among Fall 04 Cohort Students within 4 Years of High School Graduation

		2004-05		2005-06		2006-07		2007-08		4-Year Total Count	4-Year Average % of Awards
		Count	% of Awards	Count	% of Awards	Count	% of Awards	Count	% of Awards		
Tech Prep Students	AA/AS Degree	0	0%	3	75%	14	88%	15	88%	32	86%
	Certificate-60 or More Units	0	0%	0	0%	0	0%	1	6%	1	3%
	Certificate-30 to 59 Units	0	0%	1	25%	1	6%	0	0%	2	5%
	Mini-Certificate-18 or Fewer Units	0	0%	0	0%	1	6%	1	6%	2	5%
	Tech Prep Total	0	0%	4	100%	16	100%	17	100%	37	100%
Comparison Group	AA/AS Degree	0	0%	22	67%	61	88%	36	78%	119	80%
	Certificate-60 or More Units	0	0%	0	0%	0	0%	0	0%	0	0%
	Certificate-30 to 59 Units	0	0%	1	3%	2	3%	3	7%	6	4%
	Mini-Certificate-18 or Fewer Units	0	0%	10	30%	6	9%	7	15%	23	16%
	Comparison Group Total	0	0%	33	100%	69	100%	46	100%	148	100%

Source: SDCCD Information System and Tech Prep CATEMA DB

Note: 24 cells have a count less than 5.

SUMMARY AND CONCLUSIONS

This report described student characteristics of high school students who took a tech prep course(s) in their senior year and who subsequently enrolled in SDCCD the following fall term. Tech prep students were compared to a relative group of students who had also recently graduated from high school. Comparisons were made for enrollment, student outcomes, transfer to a 4-year institution, and number of awards received. Overall, tech prep students have produced higher levels of academic performance and generally achieved better student outcomes than their comparison student counterparts. It may be noted that although tech prep students generally have performed better than comparison students, tech prep students have also had greater variation across terms than the comparison students. Nevertheless, these findings suggest that the tech prep program continues to be successful in preparing students in terms of both their performance and expectations. Some key points of the analyses are noted below.

- From Fall 05 to Fall 07 an average of 25% of the tech prep senior high school participants enrolled in a SDCCD college.
- While the tech prep population had a larger proportion of females, Asian/Pacific Islander, and Filipino students, and a smaller proportion of White students than the comparison group, by Fall 2007, tech prep and comparison groups were similar in terms of primary language spoken at home and mean annual family income.
- Tech prep students were more likely to receiving EOPS services than the comparison students, though their use had declined from Fall 05 to Fall 07. Both groups were less likely to receive DSPS services.
- In most terms, tech prep students produced higher term GPAs and they successfully completed a greater percentage of their courses than comparison students.
- Tech prep students were more likely to return to SDCCD in the subsequent term than were comparison students.
- Tech prep students enrolled in a greater number of units than comparison students and enrolled in a greater number of math and English courses in their first term than did comparison students.
- Among those in the Fall 04 tech prep cohort, by the end of the 2007-08 year, 25% had transferred to a 4-year institution and 11% had received a degree or certificate. Among those in the Fall 04 comparison group cohort, by the end of the 2007-08 year, 36% had transferred to a 4-year institution and 6% had received a degree or certificate.
- Among those in Fall 04 cohort who received an award from 2004-05 to 2007-08, on average, the majority of both the tech prep (86%) and comparison students (80%) were awarded an AA/AS degree.