

To: Student Services Managers

From: Lisa Ly, Research Analyst, De Anza College

Date: September 8, 2015

Subject: Online vs. Face-to-Face: Student Demographic and Enrollment Profiles, 2012-13 to 2014-15

Background

In order to be compliant with accreditation and equity initiatives, De Anza needs to demonstrate that the student services available to students who attend college exclusively online is comparable to students who attend college in-person, which hereafter in this document are referred to as “fully-online” and “face-to-face.”

Research Request

The student services managers would like to better understand the demographic and enrollment profiles of online and face-to-face students for the academic years 2012-13, 2013-14, and 2014-15. **For the analysis, online and face-to-face enrollment is mutually exclusive categories;** meaning fully-online students are only enrolled in online courses (not concurrently enrolled in face-to-face courses) and face-to-face students are only enrolled in face-to-face sections.

Key Findings

Student Population: Between 2012-13 and 2014-15, fully-online students accounted for 12% of the population tracked while 88% were face-to-face students.

Age: Fully-online students tend to be older in age (20 to 39), whereas face-to-face students are age 24 or younger.

Gender: Fully-online enrollment is comprised of more female than male students (60% vs. 40%), while face-to-face enrollment is about equal (49% and 51%).

Ethnicity: Asians accounted for the majority of students in fully-online (36%) and face-to-face (40%) courses; Latino/a and White students comprised the second and third largest ethnic groups for fully-online and face-to-face enrollment.

Gender and Ethnicity: Asians accounted for the majority of female and male students enrolled in online and face-to-face courses; White and Latino/a students are the second and third largest ethnic groups.

Fully-online enrollment

- 1st largest group: Asian female (35%) and Asian male (39%)
- 2nd largest group: White female (26%) and White male (26%)
- 3rd largest group: Latina (21%) and Latino (18%)

Face-to-face enrollment

- 1st largest group: Asian female (40%) and Asian male (40%)
- 2nd largest group: Latina (24%) and White male (23%)
- 3rd largest group: White female (22%) and Latino (22%)

Educational Attainment: Online-only students are more likely to have an associate (7%) or bachelor degree or higher (20%), compared to face-to-face students (4% and 14%).

Educational Goal: Fully-online students are less likely to declare a goal of transfer (50%) than face-to-face students (57%).

Enrollment Status: Continuing students comprised nearly 50% of students enrolled in fully-online and face-to-face courses. Returning and first-time transfer students accounted for most of the remaining enrollment status.

Enrollment by Term: Fully-online students (30%) are more likely than face-to-face students (18%) to enroll during the summer term.

Enrollment by Division: Fully-online students are more likely than face-to-face students to enroll in science-related courses (computer, social sciences, and biological).

Fully-online enrollment

- 1st top ranked division: Business and Computer Science (32%)
- 2nd top ranked division: Social Sciences and Humanities (25%)
- 3rd top ranked division: Biological, Health, and Environmental Sciences (14%)

Face-to-face enrollment

- 1st top ranked division: Social Sciences and Humanities (17%)
- 2nd top ranked division: Physical Science, Math, and Engineering (15%)
- 3rd top ranked division: Language Arts (15%)

Course Load: 95% of fully-online students are part-time compared to 76% of face-to-face students.

Units Attempted: Fully-online students attempted fewer units per quarter compared to face-to-face students—67% of online students attempted 0.0 to 5.9 units compared to 38% of face-to-face students.

Student Success Rate: Students in fully-online courses succeeded at a lower rate (64%) compared to face-to-face students (76%).

Success Rate by Ethnicity: Across all ethnic groups, fully-online students succeeded at a lower rate than face-to-face students. African American, Filipino, and Latino/a students' success rates fall below the average success rate for online (64%) and face-to-face (76%).

Success Rate by Program: In 2014-15, the top three programs where fully-online students succeeded at a higher rate than face-to-face students are Health Sciences, Geography, and Philosophy.

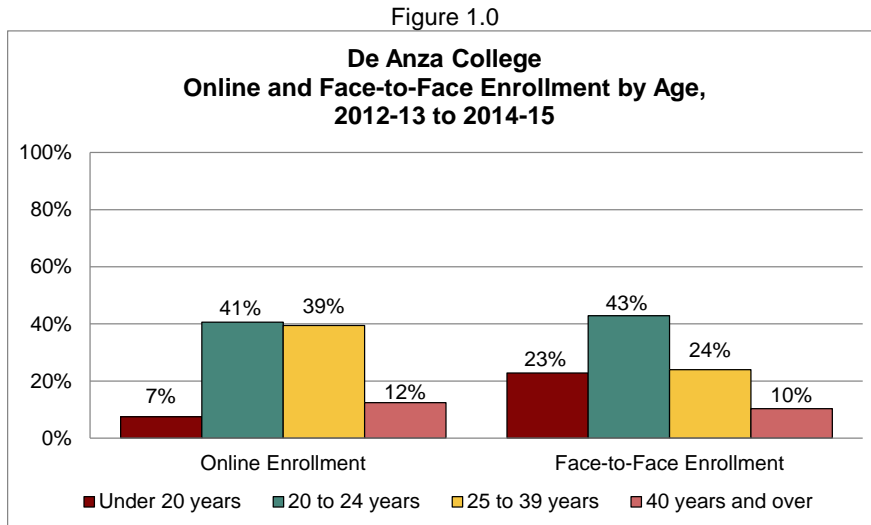
Degree and Certificate Completion Rate: Fully-online students and face-to-face students attained degrees and certificates at the same rates, 4% and 1%, respectively.

Demographic and Enrollment Profiles of Online and Face-to-Face Students | 2012-13 to 2014-15

Note: Unless specified, the analyses in this document are averages of 2012-13, 2013-14, and 2014-15 data.

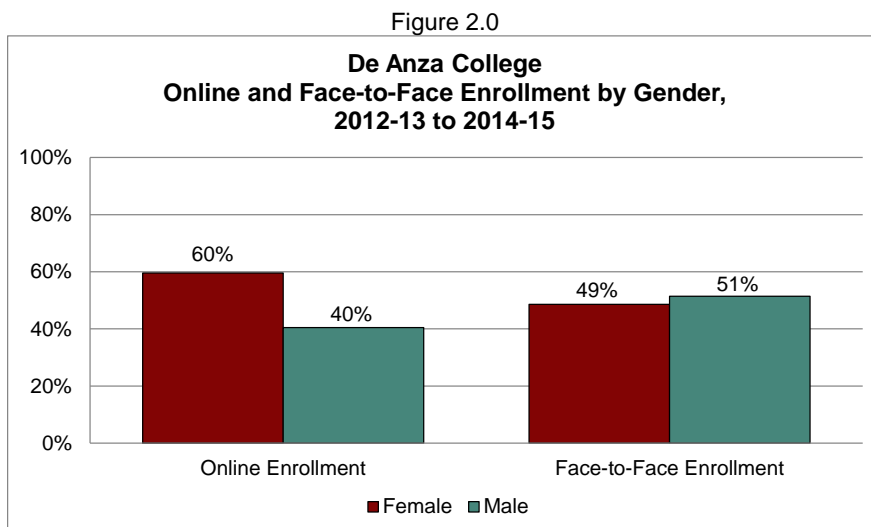
Age

The age distribution of online students skews older, whereas face-to-face students skew younger. As denoted in figure 1.0, the majority of fully-online students (80%) are between the ages of 20 to 39 (about 40% each for age groups 20-24 and 25-39). More than 50% of face-to-face students are age 24 or younger.



Gender

There are more female than male students enrolled in fully-online courses (60% vs. 40%). In contrast, female and male representation in face-to-face courses is relatively equal, 49% and 51%, respectively.



Ethnicity

Asians accounted for the majority of students in fully-online (36%) and face-to-face (40%) courses. For fully-online enrollment, White (26%) and Latino/a (20%) comprised the second and third largest ethnic groups, and for face-to-face enrollment, Latino/a (23%) and White (22%) comprised the second and third largest ethnic groups. As indicated by tables 1.0 and 2.0, African American, Filipino, Native American, and Pacific Islander students combined, accounted for less than 20 percent of the students enrolled in fully-online courses; this finding is consistent with face-to-face course enrollment as well.

Table 1.0
Fully-Online Enrollment by Ethnicity
2012-13 to 2014-15

	Students	Percent
Asian	4,568	36%
White	3,254	26%
Latino/a	2,482	20%
Filipino	927	7%
African American	846	7%
Decline to State	254	2%
Pacific Islander	97	1%
Native American	94	1%
Total	12,522	100%

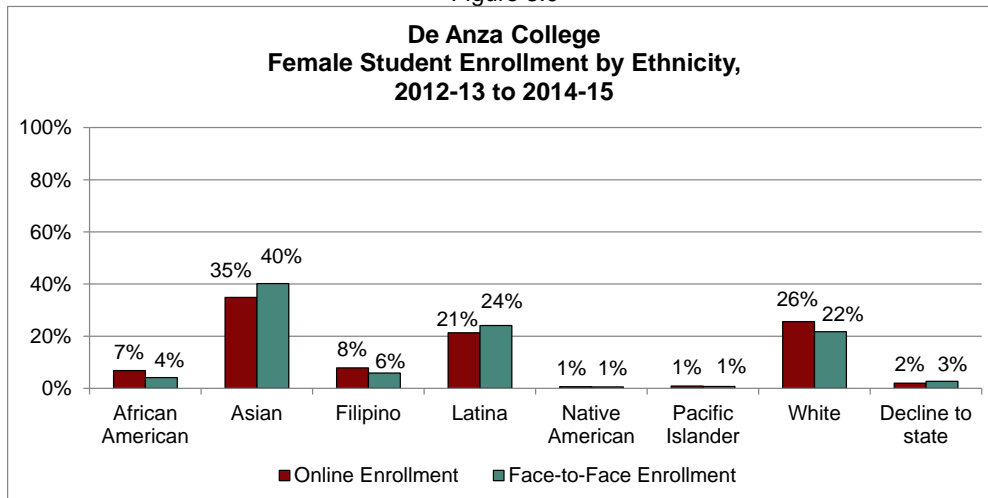
Table 2.0
Face-to-Face Enrollment by Ethnicity
2012-13 to 2014-15

	Students	Percent
Asian	38,736	40%
Latino/a	22,157	23%
White	21,336	22%
Filipino	5,904	6%
African American	4,142	4%
Decline to State	2,633	3%
Pacific Islander	695	1%
Native American	494	1%
Total	96,097	100%

Female Students by Ethnicity

Asians make up the majority of female students enrolled in fully-online (35%) and face-to-face (40%) courses. Latina and White female students account for the second and third largest ethnic groups for both online and face-to-face: *fully-online enrollment* – White (26%) and Latina (21%) and *face-to-face enrollment* – Latina (24%) and White (22%).

Figure 3.0



A closer look at the enrollment breakouts of female students by ethnicity (see Table 3.0), reveals additional enrollment trends observed between academic years 2012-13 and 2014-15:

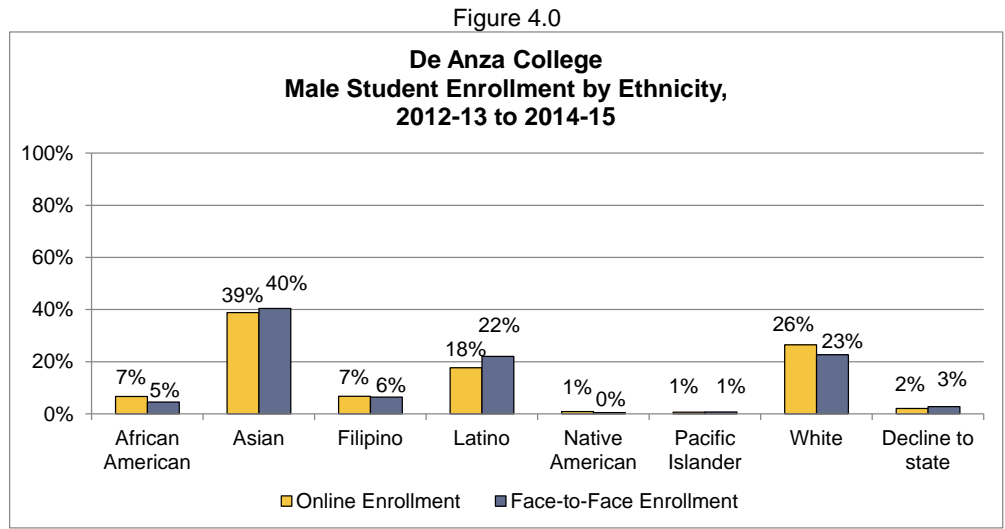
- *African American female* – fully-online enrollment increased by 2% (6% in 2012 to 8% in 2014), whereas face-to-face enrollment remained flat at 4%
- *Asian female* – fully-online and face-to-face enrollment remained unchanged at 35% and 40%, respectively
- *Filipino female* – fully-online enrollment increased by 1% (7% in 2012 to 8% in 2014), whereas face-to-face enrollment remained flat at 6%
- *Latina* – fully-online and face-to-face enrollment increased by 3% and 4%, respectively
- *Native American female* – fully-online enrollment remained unchanged at 1%; however, face-to-face enrollment decreased to less than 1%
- *Pacific Islander female* – fully-online and face-to-face enrollment, each at 1%, remained unchanged
- *White female* – enrollment decreased by 4% for fully-online (27% in 2012 to 23% in 2014) and decreased by 2% for face-to-face (23% in 2012 to 21% in 2014)

Table 3.0: Female Students by Ethnicity, Enrolled in Fully-Online vs. Face-to-Face Courses

	2012-13				2013-14				2014-15			
	Online		Face-to-Face		Online		Face-to-Face		Online		Face-to-Face	
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent
African American	158	6%	727	4%	150	6%	623	4%	200	8%	565	4%
Asian	871	35%	6,561	40%	871	35%	6,216	40%	858	35%	6,010	40%
Filipino	182	7%	935	6%	207	8%	897	6%	195	8%	895	6%
Latina	511	20%	3,652	22%	518	21%	3,791	25%	559	23%	3,827	26%
Native American	23	1%	104	1%	9	0%	74	0%	18	1%	73	0%
Pacific Islander	23	1%	130	1%	21	1%	106	1%	22	1%	107	1%
White	681	27%	3,766	23%	663	27%	3,329	22%	568	23%	3,061	21%
Decline to State	70	3%	578	4%	36	1%	361	2%	43	2%	316	2%
Total	2,519	100%	16,453	100%	2,475	100%	15,397	100%	2,463	100%	14,854	100%

Male Students by Ethnicity

Asians accounted for the majority of male students enrolled in fully-online (39%) and face-to-face (40%) courses. White and Latino students accounted for the second and third largest ethnic groups—26% and 18% respectively for online courses, and 23% and 22% respectively for face-to-face courses.



De Anza College Office of Institutional Research and Planning

Table 4.0 provides details about male student enrollment by ethnicity, between academic years 2012-13 and 2014-15. Disaggregating gender by ethnicity uncovered more enrollment variations for male than female students.

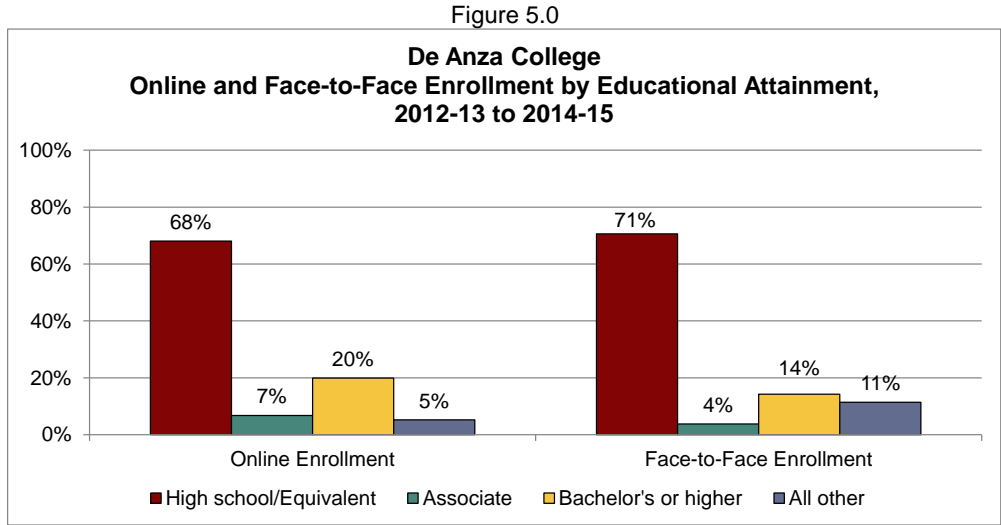
- *African American male* – fully-online enrollment grew from 6% in 2012 to 8% in 2014, whereas face-to-face enrollment declined from 5% to 4%
- *Asian male* – fully-online enrollment increased by 5% (36% in 2012 to 41% in 2014); face-to-face enrollment also grew from 40% to 41%
- *Filipino male* – fully-online enrollment remained unchanged at 7%; face-to-face enrollment increased by 1% (6% in 2012 to 7% in 2014)
- *Latino* – fully-online enrollment increased from 17% in 2012 to 18% in 2014; face-to-face enrollment grew by 4% (20% in 2012 to 24% in 2014)
- *Native American male* – fully-online enrollment remained unchanged at 1% between 2012 and 2014; however, the percentage of face-to-face enrollment decreased to less than 1% in 2014
- *Pacific Islander male* – fully-online enrollment increased from 0% in 2012 to 1% in 2014, whereas face-to-face enrollment remained flat at 1%
- *White male* – fully-online enrollment decreased by 6% (30% in 2012 to 24% in 2014); similarly face-to-face enrollment decreased by 3% (24% in 2012 to 21% in 2014)

Table 4.0: Male Students by Ethnicity, Enrolled in Fully-Online vs. Face-to-Face Courses

	2012-13				2013-14				2014-15			
	Online		Face-to-Face		Online		Face-to-Face		Online		Face-to-Face	
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent
African American	105	6%	824	5%	103	6%	735	4%	130	8%	668	4%
Asian	615	36%	6,911	40%	639	39%	6,679	41%	714	41%	6,359	41%
Filipino	114	7%	1,115	6%	109	7%	1,028	6%	120	7%	1,034	7%
Latino	297	17%	3,548	20%	290	18%	3,629	22%	307	18%	3,710	24%
Native American	15	1%	102	1%	15	1%	70	0%	14	1%	71	0%
Pacific Islander	7	0%	125	1%	13	1%	105	1%	11	1%	122	1%
White	508	30%	4,122	24%	428	26%	3,731	23%	406	24%	3,327	21%
Decline to State	45	3%	652	4%	35	2%	392	2%	25	1%	334	2%
Total	1,706	100%	17,399	100%	1,632	100%	16,369	100%	1,727	100%	15,625	100%

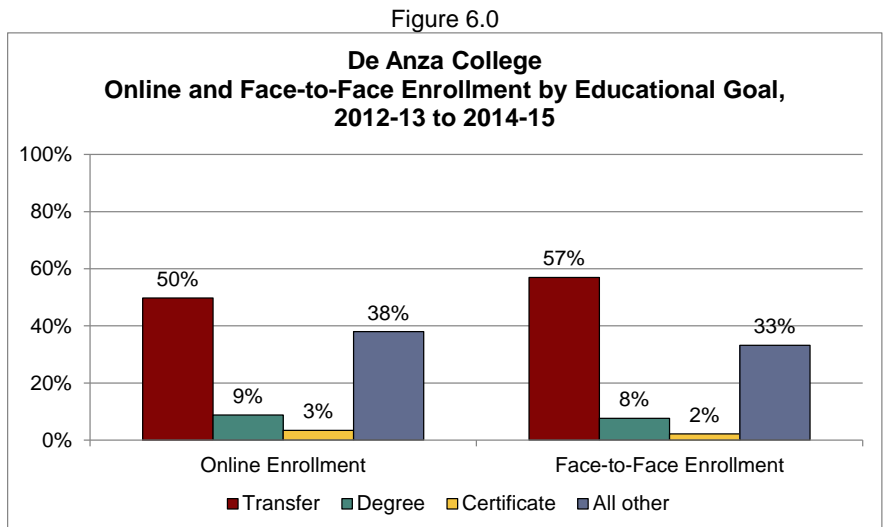
Educational Attainment

Online-only students are more likely to have an associate (7%) or bachelor degree or higher (20%) compared to face-to-face students (4% and 14%).



Educational Goal

Fully-online students are less likely to declare a goal of transfer (50%) than face-to-face students (57%). This result could be attributed to the finding in the *Educational Attainment* section, which found that fully-online students are likely to possess a bachelor’s degree or higher. Very few face-to-face students (10%) indicated their educational goal was to earn a degree or certificate at De Anza.



Enrollment Status

Continuing students comprised nearly 50% of the students enrolled in fully-online and face-to-face courses.

Table 5.0 Enrollment Status of Fully-Online Students, 2012-13 to 2014-15

	Students	Percent
Continuing	6,438	48%
Returning	3,581	27%
First-time Transfer	2,957	22%
First-time Student	258	2%
Concurrent Enrolled	130	1%
Total	13,364	100%

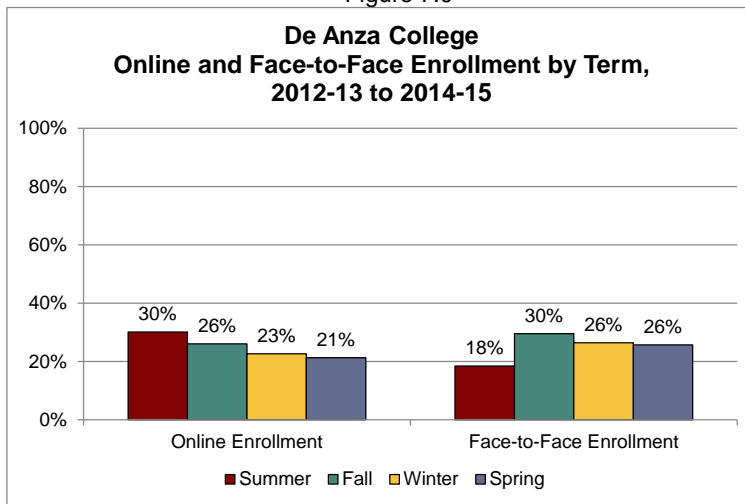
Table 6.0 Enrollment Status of Face-to-Face Students, 2012-13 to 2014-15

	Students	Percent
Continuing	62,091	51%
Returning	21,361	18%
First-time Transfer	20,983	17%
First-time Student	14,397	12%
Concurrent Enrolled	2,836	2%
Total	121,668	100%

Enrollment by Term

Fully-online students (30%) are more likely than face-to-face students (18%) to enroll in the summer term.

Figure 7.0



Enrollment by Division

Students enrolled in fully-online courses took sections that primarily fell under Business and Computer Science (32%) followed by Social Sciences and Humanities (25%) and Biological, Health, and Environmental Sciences (14%) divisions. The top three divisions most face-to-face students are enrolled in are Social Sciences and Humanities (17%), Physical Science, Math, and Engineering (15%), and Language Arts (15%).

Table 7.0 Fully-Online Enrollment by Division
2012-13 to 2014-15

	Students	Percent
2CB Business & Computer Science	4,940	32%
2SS Social Sciences & Humanities	3,862	25%
2BH Biological, Health, & Environmental Sciences	2,123	14%
2LA Language Arts	1,693	11%
2IC Intercultural/International Studies	1,000	6%
2PS Physical Science, Math, & Engineering	743	5%
2CA Creative Arts	498	3%
2LB Library Services	305	2%
2ST Student Services	273	2%
2PE Physical Education/Athletics	44	0%
2AT Applied Technologies	28	0%
2LR Learning Resources	2	0%
Total	15,511	100%

Table 8.0 Face-to-Face Enrollment by Division
2012-13 to 2014-15

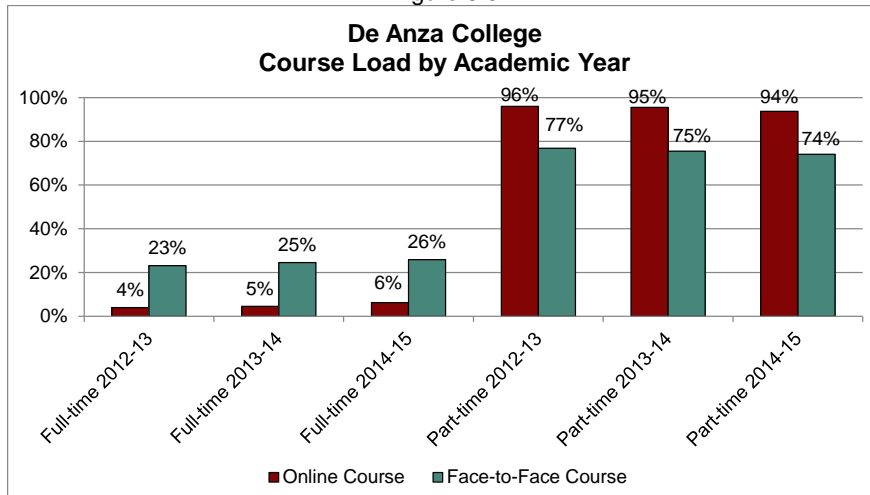
	Students	Percent
2SS Social Sciences & Humanities	33,529	17%
2PS Physical Science, Math, & Engineering	29,388	15%
2LA Language Arts	28,035	15%
2IC Intercultural/International Studies	16,958	9%
2PE Physical Education/Athletics	16,930	9%
2BH Biological, Health, & Environmental Sciences	16,734	9%
2CA Creative Arts	15,816	8%
2CB Business & Computer Science	15,647	8%
2ST Student Services	13,148	7%
2AT Applied Technologies	2,542	1%
2SE DSPS	2,041	1%
2LR Learning Resources	990	1%
Total	191,758	100%

Course Load: Full-time/Part-time

Fully-online (95%) and face-to-face students (76%) are likely to be part-time students. Disaggregating the course load by academic year 2012-13, 2013-14, and 2014-15 reveals the following:

- Online-only enrollment experienced a 2% growth in full-time students (4% in 2012 to 6% in 2014) and saw a 2% decline in part-time students (96% in 2012 to 94% in 2014)
- Face-to-face enrollment also encountered an increase in full-time students, 23% in 2012 to 26% in 2014, and saw the same percentage decrease of 3% in part-time students

Figure 8.0



Units Attempted

Fully-online students attempted fewer units per quarter compared to face-to-face students—67% of online students attempted 0.0 to 5.9 units compared to 38% of face-to-face students.

Table 9.0 Attempted Units by Fully-Online Students
2012-13 to 2014-15

	Students	Percent
0.0 to 2.9	772	6%
3.0 to 5.9	7,795	61%
6.0 to 8.9	1,551	12%
9.0 to 11.9	1,440	11%
12.0 to 14.9	931	7%
15.0 to 17.9	239	2%
18.0 to 20.9	78	1%
21.0 and higher	14	0%
Total	12,820	100%

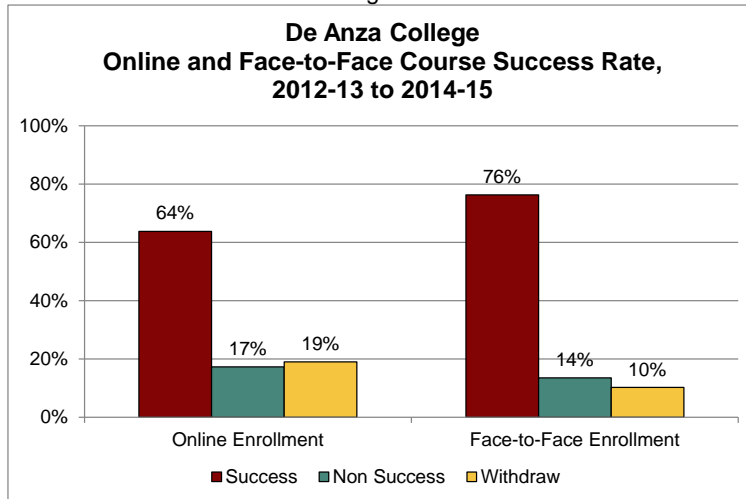
Table 10.0 Attempted Units by Face-to-Face Students
2012-13 to 2014-15

	Students	Percent
0.0 to 2.9	14,391	11%
3.0 to 5.9	34,900	27%
6.0 to 8.9	15,016	12%
9.0 to 11.9	20,158	16%
12.0 to 14.9	22,055	17%
15.0 to 17.9	11,911	9%
18.0 to 20.9	7,987	6%
21.0 and higher	1,507	1%
Total	127,925	100%

Student Success Rate

Students in face-to-face courses succeeded at a higher rate (76%) than fully-online students (64%). Face-to-face courses have lower percentages of students who are not successful and withdraw (14% and 10%) than fully-online courses (17% and 19%).

Figure 9.0



Success Rate by Ethnicity

Disaggregating online and face-to-face students' success rate by ethnicity supports the aforementioned finding: face-to-face students' succeed at a higher rate than fully-online students *across all ethnic groups*.

Using the average online success rate of 64% as a benchmark, African American, Filipino, and Latino/a students' success rates fall below the average. Asians and Whites are the only two ethnic groups who performed above the average.

The same trend is observed for face-to-face course success rate—African American, Filipino, and Latino/a success rates are below the average face-to-face success rate of 76%, and they trail behind their Asian and White counterparts.

Table 11.0: Success Rate by Ethnicity, Enrolled in Fully-Online vs. Face-to-Face Courses
2012-13 to 2014-15

	Online						Face-to-Face					
	Success		Non Success		Withdraw		Success		Non Success		Withdraw	
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent
African American	927	47%	553	28%	494	25%	13,281	66%	4,134	21%	2,720	14%
Asian	5,413	70%	1,012	13%	1,259	16%	156,577	81%	20,047	10%	16,652	9%
Filipino	1,018	62%	295	18%	333	20%	22,859	74%	4,530	15%	3,339	11%
Latino/a	2,711	56%	1,088	22%	1,085	22%	76,917	68%	22,007	19%	14,277	13%
Native American	114	56%	49	24%	40	20%	1,559	72%	322	15%	284	13%
Pacific Islander	112	53%	48	23%	50	24%	2,381	71%	613	18%	355	11%
White	4,020	68%	850	14%	1,030	17%	73,162	79%	10,130	11%	9,250	10%
Decline to state	338	71%	70	15%	68	14%	10,635	81%	1,540	12%	1,035	8%

Success Rate by Program

In 2014-15, 37 programs were offered *both* online and face-to-face. Table 12.0 compares fully-online and face-to-face students' success rate by program. The top three programs where fully-online students *succeeded at a higher rate* than face-to-face students (see column "Difference in Success Rate") are Health Sciences (+17%), Geography (+13%), and Philosophy (+12%). Conversely, the top three programs where fully-online students *succeeded at a lower rate* than face-to-face students are Environmental Science (-38%), Physical Education (-35%), and Linguistics (-32%).

Table 12.0 Success Rate by Program, Fully-Online vs. Face-to-face
2014-15

2014-15 Programs (offered online and in-person)	Fully-Online Students		Face-to Face Students		Difference in Success Rate (fully-online success rate subtract face-to-face success rate)
	Success (N)	Success Rate (%)	Success (N)	Success Rate (%)	
HLTH Health Sciences	39	83%	111	66%	17%
GEO Geography	74	84%	553	71%	13%
PHIL Philosophy	107	83%	1,779	71%	12%
REST Real Estate	26	70%	206	62%	8%
SOC Sociology	83	78%	1,313	72%	5%
HTEC Health Technologies	108	73%	512	68%	5%
NUTR Nutrition	96	76%	819	71%	5%
ECON Economics	169	81%	2,012	77%	5%
COUN Counseling	43	96%	2,522	93%	3%
MET Meteorology	114	81%	183	79%	2%
EWRT English Writing	369	74%	6,227	73%	0%
PSYC Psychology	201	72%	3,206	73%	-1%
ANTH Anthropology	149	74%	2,095	75%	-1%
CIS Computer Information Systems	487	65%	2,226	66%	-1%
HIST History	193	61%	2,751	64%	-2%
MUSI Music	65	64%	989	68%	-4%
C D Child Development	41	66%	1,069	72%	-6%
MATH Mathematics	76	51%	8,563	57%	-6%
WMST Women's Studies	39	59%	251	65%	-6%
BIOL Biology	157	63%	2,085	70%	-7%
JOUR Journalism	80	71%	233	78%	-7%
ACCT Accounting	260	59%	1,788	68%	-9%
ICS Intercultural Studies	159	64%	1,836	74%	-10%
ELIT English Literature	21	62%	550	72%	-11%
GEOL Geology	32	70%	327	81%	-12%
BUS Business	969	61%	1,614	73%	-12%
CDI CAD & Digital Imaging	76	63%	141	79%	-15%
HUMA Human Development	14	67%	827	83%	-16%
HUMI Humanities	184	60%	2,003	76%	-17%
ARTS Arts	27	55%	2,217	75%	-20%
PHTG Photography	31	47%	555	70%	-23%
POLI Political Science	102	47%	1,741	73%	-26%
E S Environmental Studies	244	50%	769	78%	-28%
CLP Career Life Planning	17	38%	297	69%	-31%
LING Linguistics	2	33%	66	65%	-32%
P E Physical Education	19	43%	5,304	79%	-35%
ESCI Environmental Science	4	50%	1,349	88%	-38%

Degree and Certificate Completion Rate

Between 2012-13 and 2014-15, fully-online students and face-to-face students attained degrees and certificates at the same rates, 4% and 1%, respectively.

Degrees and Certificates Awarded to Fully-Online Students

De Anza has 6 associate degrees and 3 certificates, offered 100% online (see Table 13.0). Between 2012-13 and 2014-15, among the total 702 degrees and certificates *awarded to fully-online students*, 400 (369 degrees and 31 certificates) were from fully-online programs.

Table 13.0 lists the online degrees and certificates awarded to fully-online students.

- The top three online degrees conferred were from Liberal Arts with emphasis in Business and Computer Information Systems (28%), Social and Behavioral Sciences (25%), and Science/Math/Engineering (15%)
- The top online certificate awarded was from Business Administration (6%)

Table 13.0 Online Degrees & Online Certificates Awarded to Fully-Online Students
2012-13 to 2014-15

	Students	Percent
Degree: Liberal Arts - Business & CIS	113	28%
Degree: Liberal Arts - Social & Behavioral Sciences	99	25%
Degree: Liberal Arts - Science/Math/Engineering	60	15%
Degree: Business Administration	42	11%
Degree: Business Administration for Transfer	34	9%
Certificate: Business Administration	25	6%
Degree: Liberal Arts - Arts & Letters	21	5%
Certificate: Entrepreneurship	5	1%
Certificate: Network Basics	1	0%
Total	400	100%