El Camino College

Analysis of Student Ethnic Groups – Classification and Performance, Fall 2014



Introduction

The purpose of this report is to provide a better understanding of the ethnic diversity of El Camino College (ECC) students by exploring how students are sorted into the eight ethnic groups defined by the California Community Colleges Chancellor's Office (CCCCO). ECC collects data on student identification with 21 different ethnic subgroups when students complete their initial applications; however, most equity research disaggregates students according to the CCCCO's eight ethnic groups, which is consistent with the data presented in the Student Success Scorecard.

In the following sections, we describe how the CCCCO translates the ethnicity data submitted on the ECC application and assigns an ethnic group to students. We then present ECC enrollment data for Fall 2014 disaggregated by all ethnicity categories, including the subgroups identified on the ECC application. We then evaluate whether or not an analysis of student outcomes at the subgroup level would affect our understanding of student diversity and equity at ECC. Lastly, we present our recommendations on whether or not a focus on ethnic subgroups would be useful in the context of student outreach and student equity research.

Classifying Students by Ethnicity

The CCCCO classifies students into eight mutually exclusive ethnic groups:

- African American
- American Indian/Alaskan Native
- Asian
- Latino
- Pacific Islander
- Two or More
- White
- Undecided/Unknown

These classifications are used to describe student enrollment and outcomes in the Student Success Scorecard, and also for our own campus-based research. We will refer to these categories as the "CCCCO ethnic groups."

However, when students apply to El Camino College, they are given a much larger array of ethnic subgroups to choose from, and are able to choose more than one. We will refer to these

as the "ECC ethnic subgroups." The 21 ethnic subgroups enumerated in the ECC application are the following:

- Hispanic/Latino
- Mexican, Mexican-American, Chicano¹
- Central American
- South American
- Hispanic Other
- Black or African American
- American Indian/Alaskan Native²
- Indian
- Chinese
- Japanese
- Korean
- Laotian
- Cambodian
- Vietnamese
- Filipino
- Asian Other
- Guamanian
- Hawaiian
- Samoan
- Pacific Islander Other
- White

¹ From this point forward, we will refer to this category as "Mexican."

² From this point forward, we will refer to this category as "American Indian."

Figure 1 is a screenshot of what students see when answering the race/ethnicity question on the ECC application.

Race/Ethnicity Per U.S. Department of Education guidelines, colleges are required to collect this racial and ethnic data clear selection A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. If yes, check one or more: Mexican, Mexican-American, Chicano Central American South American ✓ Hispanic: Other What is your race? Check one or more: Asian: Indian Asian: Chinese Asian: Japanese Asian: Korean Asian: Laotian Asian: Cambodian Asian: Vietnamese Asian: Filipino A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent A person having origins in any of the black racial groups of Africa. American Indian / Alaskan Native Pacific Islander: Guamanian Pacific Islander: Hawaiian Pacific Islander: Samoan ✓ Pacific Islander: Other A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. ✓ White

Figure 1. Race/Ethnicity Options on the ECC Application

Students are first asked whether or not they are "Hispanic or Latino," regardless of what they consider to be their race. (Hispanic/Latino is considered to be an "ethnicity" and not a "race.") However, students are not forced to choose one of the 16 options that are provided for "race." In other words, they can solely identify with Hispanic/Latino subgroups, even though they are considered to be "ethnicities" and not "races."

A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

The webpage does not limit the number of categories a student can choose, and though they are presented with 21 option in totals, the majority of students enrolled in Fall 2014 (85%) chose only one or two subgroups, as shown in Table 1. Furthermore, 97% chose no more than three and no student selected more than six categories. It should be noted that students are not asked if there is one group with which they identify the most. Therefore, we cannot speculate on the degree to which students associate with each of the subgroups they choose.

Table 1. Number of Ethnic Subgroups Selected by Students

Number of Subgroups Selected	Number of Students	Percent of Students
0	176	0.7%
1	11005	45%
2	9767	40%
3	2837	12%
4	377	1.6%
5	95	0.4%
6	24	0.1%

Further, it is possible that students with identical ethnic backgrounds could choose different categories on the application due to different interpretations of what each category includes. As shown in Figure 1, the application explains the criteria for belonging to six of the categories, but students may interpret these explanations in different ways.

Translating ECC Ethnicity Data to CCCCO Categories

The algorithm used by the CCCCO to translate the ethnicity data from the ECC application into the eight mutually exclusive ethnic groups is not necessarily intuitive. A comparison of the two classification systems reveals that ECC students who identify with ethnic subgroups in more than one of the CCCCO's eight categories are not necessarily labeled as "Two or More" ethnicities. Instead, any student who identifies as Hispanic/Latino or with a Hispanic/Latino subgroup (Mexican, Central American, South American, or Hispanic-Other) is automatically labeled as "Latino," regardless of whether or not they identified with other non-Latino subgroups. In other words, the Latino category trumps all others. This means that the Latino category may include many students who identify with two or more ethnic subgroups, and the "Two or More" category does not include any students who identify with Latino subgroups.

Table 2 provides a crosswalk to demonstrate how the CCCCO sorts students into the eight ethnicity categories. The columns match the CCCCO ethnic groups with the corresponding ECC ethnic subgroups. As shown, there are three categories associated with only one subgroup each: African American, American Indian, and White. The Asian category is linked to nine distinct subgroups and the Pacific Islander category is linked to four subgroups. Therefore, as with the CCCCO Latino category, the blanket "Asian" and "Pacific Islander" labels may obscure the diversity that exists within these larger groups.

Table 2. How CCCCO Assigns Ethnicity

	Can identify with subgroups in other columns	Cannot identify	Cannot identify as Latino				
CCCCO Ethnic Groups³ →	Latino	African American	American Indian/ Alaskan Native	Asian	Pacific Islander	White	Two or More
ECC Ethnic Subgroups →	 Latino Mexican Central	• Black/ African American	• American Indian/ Alaskan Native	 Indian Chinese Japanese Korean Laotian Cambodian Vietnamese Filipino Asian - Other 	 Guamanian Hawaiian Samoan Pacific Islander - Other 	• White	Two or more subgroups from different columns, except Latino

 $^{^{\}rm 3}$ "Unknown/undecided" is omitted from this table.

ECC Student Demographics

Table 3 shows how students who were enrolled in Fall 2014 and identified with the various ECC ethnic subgroups were then classified by the CCCCO. The ECC categories are displayed in the rows and the CCCCO categories are displayed in the columns. Each cell includes the number of students who identified with a particular subgroup and were classified in the corresponding CCCCO ethnic category. The final column presents the total number of students who self-identified with each of the 21 ethnic subgroups. The final row shows how many students were classified in each of the eight CCCCO categories.

Table 3. Fall 2014 Student Enrollment by Ethnicity

CCCCO assigned group → Student-identified group(s) ↓	African American	Amer. Ind. or Alask. Native	Asian	Latino	Pacific Islander	Two or More	Unknown or Decline	White	Total
Hispanic/Latino				11,719					11,719
Mexican				7,738					7,738
Central American				2,138					2,138
South American				701					701
Hispanic-Other				2,284					2,284
Indian			168	17		17			202
Chinese			510	42		98			650
Japanese			642	129		221			992
Korean			751	24		62			837
Laotian			8	4		2			14
Cambodian			51	5		1			57
Vietnamese			467	9		30			506
Filipino			909	142		228			1,279
Asian-Other			371	41		63			475
Black/AA	3,910			380		445			4,735
American Indian		35		322		219			576
Guamanian				3	8	13			24
Hawaiian				39	20	84			143
Samoan				19	46	32			97
PI-Other				21	61	53			135
White				1,753		825		3,297	5,875
Total	3,910	35	3,660	12,009	123	1,071	176	3297	24,281

For example, the "Black/African American" row displays how the 4,735 students who self-identified as "Black/African American" were eventually categorized by the CCCCO. The first column shows that 3,910 of those students were categorized as "African American." Those students did not identify with any other subgroup. The 380 students noted in the "Latino" column represent African American students who were categorized as Latino; those students selected both "Black/African American" and any one of the Latino subgroups. If they also selected additional subgroups (e.g. American Indian, White, etc.), they would remain under the Latino category. Lastly, 445 of the students who self-identified as "Black/African American" were categorized as "Two or More," signifying that they also identified with another ethnic subgroup, but did not identify with a Latino subgroup.

Table 4. Fall 2014 Student Enrollment by Ethnicity

CCCCO assigned group → Student-identified group(s) ↓	African American	Amer. Ind. or Alask. Native	Asian	Latino	Pacific Islander	Two or More	Unknown or Decline	White	Total
Hispanic/Latino				100%					11,719
Mexican				100%					7,738
Central American				100%					2,138
South American				100%					701
Hispanic-Other				100%					2,284
Indian			83%	8%		8%			202
Chinese			78%	6%		15%			650
Japanese			65%	13%		22%			992
Korean			90%	3%		7%			837
Laotian			57%	29%		14%			14
Cambodian			89%	9%		2%			57
Vietnamese			92%	2%		6%			506
Filipino			71%	11%		18%			1,279
Asian-Other			78%	9%		13%			475
Black/AA	83%			8%		9%			4,735
American Indian		6%		56%		38%			576
Guamanian				13%	33%	54%			24
Hawaiian				27%	14%	59%			143
Samoan				20%	47%	33%			97
PI-Other				16%	45%	39%			135
White				30%		14%		56%	5,875
Total	3,910	35	3,660	12,009	123	1,071	176	3,297	24,281

Table 4 presents the same data, but with the student counts replaced by the percent of students who identified with any subgroup (row) and who were eventually assigned to each of the ethnic groups (columns). For example, 83% of students who identified as Black/African American on their ECC application ended up being classified as African American by the CCCCO; 8% were classified as Latino; and 9% were classified as Two or More.

Three of the eight CCCCO categories are associated with nine or more ethnic subgroups: Latino, Asian, and Two or More. The composition of each of these groups is discussed below.

Latino Students

As discussed, any student who identifies with one of the Latino subgroups (Hispanic/Latino, Mexican, Central American, South American, and Hispanic-Other) is automatically included in CCCCO's "Latino" category, regardless of whether or not they may have identified with a subgroup associated with a different ethnicity. As a result, the CCCCO Latino category is more diverse than the other ethnic groups, and it includes students who identified with all of the ECC subgroups. It is also the largest ethnic group, constituting nearly 50% of students enrolled in Fall 2014. In that term, 15% of Latinos also identified as White, 3% identified as Black/African American, and another 3% identified with at least one Asian subgroup (see Table 4). There is also diversity within the population of students who identify only with Hispanic/Latino subgroups. The largest subgroup was Mexican; 64% of Latino students identified as Mexican. The Latino subgroup with the smallest representation is South American; only 6% of Latino students identified with that subgroup.

Not surprisingly, almost all of the students who identified with a Latino subgroup chose more than one. This may be due to the structure of the race/ethnicity questions on the ECC online application. Once "Hispanic or Latino" is selected, students are then asked – but not forced – to "check one or more" of the four Hispanic/Latino subgroups. Ninety-four percent of Latino students selected two or three ethnic subgroups (including the broad "Hispanic or Latino" category). The Fall 2014 enrollment data may also include students who completed a previous version of the application that did not have the first question, which screens for Hispanic/Latino affiliation. This explains why there is a small number of students associated with a Hispanic/Latino subgroup from the ECC application, but not the overarching "Hispanic/Latino" category.

Asian Students

The CCCCO Asian category is similarly diverse, as nine different ECC ethnic subgroups are all classified as Asian. In Fall 2014, there were 4,674 students who identified with at least one of these groups; however, only 3,660 (78%) were recognized as Asian in the CCCCO classification system (see Table 4). Those students did not identify with any non-Asian subgroup, and 95% of them chose only one Asian subgroup. In other words, students who identified as Asian tended to identify with only one ethnic subgroup. The largest Asian subgroup, with 1,279 students, was Filipino. It is worth noting that 827 Filipino students (or 65%) identified only as Filipino, and not with any other Asian subgroup. Korean was another subgroup that identified only as Korean at a high rate. While it is a relatively small population – only 837 students identified as Korean –

86% of them identified exclusively as Korean. These are unique populations that may be obscured under the CCCCO classification system. While these two are not underperforming subgroups, and thus may not be a priority for intervention programs, understanding that these populations exist may be useful for the purposes of outreach and other programmatic decisions.

"Two or More" Students

The most nebulous group is the "Two or More" category. This group includes representatives from all of the subgroups, except for those considered to be "Latino," as defined by the CCCCO. Students assigned to this category accounted for less than 5% of total Fall 2014 enrollment. While all non-Latino subgroups are represented in this category, 90% of the "Two or More" students identified as White and/or Asian. Other characteristics include:

- 77% identified as White;
- 59% identified with at least one Asian subgroup;
- 42% identified as African American; and
- 21% identified as Filipino.

Among these students, 81% only chose two different subgroups and 97% chose no more than three. It is difficult to identify all the possible ethnic group combinations. However, almost half of students in the "Two or More" category (47%) identified as White and also with an Asian subgroup. Twenty-four percent identified as both White and African American. Only 10% identified as both African American and Asian.

Student Performance and Ethnicity

Understanding the nuances behind the ethnic diversity of ECC students is useful for many reasons, and may be particularly relevant in the context of student equity research. In this section, we compare student outcomes using two metrics: success rate (the number of passing grades achieved out of the total number of course enrollments) and retention rate (the number of students who remained enrolled in courses for the entire term as a percent of the total initial course enrollments). We evaluate these metrics across the eight CCCCO ethnic groups, as well as the 21 ECC ethnic subgroups, for Fall 2014. We then discuss whether or not it is necessary or useful to regularly evaluate student outcomes at the subgroup level, in addition to the analysis that is already conducted for the eight overarching ethnic categories.

CCCCO Ethnicity v. ECC Ethnic Subgroup

Table 5 displays student outcomes for each of the eight larger ethnic groups. The outcomes for the entire population of ECC students are highlighted in yellow and serve as a point of reference for comparing groups of students. Groups that performed five or more percentage points above average are highlighted in green, while groups that performed five or more percentage points below are highlighted in red.

Table 5. Student Outcomes by CCCCO Ethnic Group

	Number of Students	Total Number of Grades	Total Pass	Not Pass	Withdraw	Success Rate	Retention Rate
Asian	3,660	10,341	8,084	956	1,301	78%	87%
White	3,297	8,596	6,632	739	1,225	77%	86%
Two or More	1,071	2,970	2,095	389	486	71%	84%
Unknown or Decline	176	427	298	48	81	70%	81%
All Students	24,281	65,658	44,385	9,605	11,668	68%	82%
Latino	12,009	32,781	21,452	5,256	6,073	65%	81%
American Indian	35	90	55	15	20	61%	78%
Pacific Islander	123	358	200	77	81	56%	77%
African American	3,910	10,095	5,569	2,125	2,401	55%	76%

Success rates spanned a wide range across the ethnic groups: 55% to 78%. It is apparent that African American, American Indian, and Pacific Islander students performed well below average – more than 5 percentage points below the average success rate for all students. Though the latter two are relatively small populations, their data are worth noting due to the size of the observed gaps. Pacific Islander students were successful at a rate that was 12 percentage points below average and 22 percentage points below the highest performing group (Asian). Similarly, African American students were successful at a rate that was 13 percentage points below average and 23 percentage points below the highest performing group (Asian).

It is also apparent that students in the Asian and White groups outperformed their peers, with success rates that were 10 and nine percentage points above average, respectively. Students in the Two or More category also performed slightly higher than the average. This may not be surprising considering that 90% of those students identified as White and/or Asian on their ECC applications, which are the highest performing of the eight CCCCO ethnic groups.

There is less spread when it comes to retention rate. The average course retention rate for all students was 82%, and the range across the eight ethnic groups was 11 percentage points. As with success rates, Pacific Islander and African American students performed at least five percentage points below average. However, these gaps are much smaller than the gaps observed when comparing success rates.

In order to evaluate if disaggregating data only by the eight CCCCO ethnic groups may be obscuring important information about smaller populations of students, we then examined the same student outcome data for each of the 21 ECC ethnic subgroups. The data presented in Table 6 include all students who identified with a particular subgroup, even if they identified

with multiple subgroups. Therefore, students may be accounted for in more than one row. This is different from the analysis that uses the eight ethnic categories, which are mutually exclusive.

Table 6. Student Outcomes by Ethnic Subgroup

	Number of Students ⁴	Number of Grades	Success Rate	Retention Rate
Vietnamese	506	1,407	80%	88%
Japanese	992	2,853	78%	88%
Chinese	650	1,915	77%	88%
Indian	202	526	77%	86%
Asian-Other	475	1,330	76%	88%
Korean	837	2,393	76%	86%
Filipino	1,279	3,534	75%	85%
White	5,875	15,644	74%	85%
Guamanian	24	64	72%	86%
Hawaiian	143	404	68%	83%
All Students	24,281	65,658	68%	82%
South American	701	1,904	67%	82%
Cambodian	57	122	67%	80%
Mexican	7,738	21,161	66%	82%
Latino ⁵	11,719	32,005	66%	82%
Laotian	14	34	65%	74%
Hispanic-Other	2,284	6,356	64%	81%
American Indian	576	1,556	64%	81%
Central American	2,138	5,827	63%	81%
PI-Other	135	403	61%	77%
Black/African American	4,735	12,388	56%	77%
Samoan	97	271	51%	74%

For the most part, the results at the subgroup level cohered with the results obtained by disaggregating students at the larger ethnic group level. Four subgroups, which are highlighted in red, had success rates that were at least five percentage points below the average. These include African Americans, two Pacific Islander subgroups (Samoan and Pacific Islander-Other), and one Latino subgroup (Central American). The success rate for all students who identified as African American (56%) was nearly identical to the success rate for students who exclusively identified as African American (55%), as previously shown in Table 5. On the other hand, we

⁴ Students may be included in multiple subgroups.

⁵ ECC students are given the option of selecting "Latino" as an ethnic subgroup. The number who chose this group is slightly less than the total number of Latino students counted by the CCCCO because 103 students identified as Latino, but not as any of the other Hispanic subgroups.

observed variation among the Pacific Islander subgroups. Samoans achieved the lowest success rate (51%), which was four percentage points lower than the success rate observed for all students who exclusively identify with Pacific Islander subgroups. This suggests that not all Pacific Islander subgroups are underperforming, which will be discussed later. All Latino subgroups remained below the average for all students, with the Central American subgroup achieving the lowest success rate.

On the other end of the spectrum, eight subgroups performed more than five percentage points above the average. These include all students who identified as White and students who identified with seven of the nine Asian subgroups. The overall rankings of the various subgroups are consistent with the data disaggregated across the eight larger ethnic group categories, as was shown in Table 5. This suggests that, for the most part, the same broad conclusions can be drawn by analyzing the data across the CCCCO ethnic groups and across the ECC ethnic subgroups.

To further illustrate this conclusion, Table 7 compares the student outcome data for the three CCCCO ethnic groups that are each linked with only one ECC ethnic subgroup: African American, American Indian, and White. Again, the subgroup category is more inclusive; some students who identify with these categories are eventually classified as Latino or "Two or More" by the CCCCO.

Table 7. Performance of CCCCO Groups vs. ECC Subgroups

CCCCO Group			ECC Subgroup			
(cannot identify with other subgroups)			(can identify with other subgroups)			
	Success	Retention		Success	Retention	
	Rate	Rate		Rate	Rate	
White	77%	86%	White	74%	85%	
American Indian	61%	78%	American Indian	64%	81%	
African			Black/African			
American	55%	76%	American	56%	77%	

The results for the two African American groups are nearly identical; whether or not students identified exclusively as African American or with additional ethnic subgroups did not affect the average success and retention rates. On the other hand, students who exclusively identified as White – and thus ended up in the CCCCO "White" category – slightly outperformed the entire group of White students, which includes those who identified with other subgroups, by three percentage points. The reverse is seen when comparing the two American Indian groups. Students who identified as American Indian in addition to at least one other ethnic subgroup outperformed those who exclusively identified as American Indian, but only by three percentage points.

Latino Students

Because the CCCCO Latino category is so large and diverse – including students who identify with all 21 ethnic subgroups – we broke down the student outcome data for all Latinos. The following table presents the data for all 12,009 Latino students, disaggregated by the various ethnic subgroups with which they also identify. It is possible that one student could identify with more than one subgroup and thus would be factored into the outcome measures for multiple groups. The subgroups are sorted by success rate.

Table 8. Latino Student Performance, by Ethnic Subgroup

	Number of Students	Number of Grades	Success Rate	Retention Rate
Korean	24	69	77%	96%
Chinese	42	133	74%	84%
Asian-Other	41	107	70%	86%
Filipino	142	422	69%	85%
White	1753	4761	69%	82%
Japanese	129	355	68%	81%
Hawaiian	39	114	68%	80%
South American	701	1904	67%	82%
PI-Other	21	51	67%	76%
Mexican	7738	21161	66%	82%
CCCCO Latino	12009	32781	65%	81%
American Indian	322	890	65%	82%
Hispanic-Other	2284	6356	64%	81%
Central American	2138	5827	63%	81%
Indian	17	38	63%	74%
Black/African American	380	1042	57%	76%
Samoan	19	56	52%	70%
Cambodian	5	10		
Guamanian	3	10	-	
Laotian	4	10		
Vietnamese	9	25		

This table only includes students within each subgroup who were eventually categorized as Latino. As a result, we cannot report on the data for four subgroups (Cambodian, Guamanian, Laotian, and Vietnamese), which each had fewer than 10 students classified as Latino.

The success rate for the entire CCCCO Latino category, highlighted in yellow, was 65%. Success rates for the 17 subgroups included ranged from 52% to 77%. Students who identified as Latino and either Korean, Chinese, or "Asian – Other" outperformed the average for the entire group by at least five percentage points (when comparing success rates). On the other hand, those

Latino students who also identified as Black/African American or Samoan performed more than five percentage points below the average Latino success rate. This is consistent with what was observed in the data for all students in those subgroups (see Table 6), not only those who dually identify as Latino, as shown in Table 8.

Among the Hispanic/Latino subgroups, which constituted the majority of the Latino category, performance was fairly consistent. Students identifying as South American outperformed the rest of the group, with a success rate of 67%, though Mexican students were close behind at 66%. Retention rates for all Hispanic/Latino subgroups were between 81% and 82%.

Asian Students

This next table presents the data for all students who identified with any Asian subgroup, regardless of whether or not they were eventually classified as "Asian," and compares their outcomes to the group of students who were assigned to CCCCO's Asian category.

Table 9. Asian Student Performance, by Ethnic Subgroup

	Number of Students ⁶	Number of Grades	Success Rate	Retention Rate
Vietnamese	506	1,407	80%	88%
Japanese	992	2,853	78%	88%
CCCCO Asian ⁷	3,660	10,341	78%	87%
Chinese	650	1,915	77%	88%
Indian	202	526	77%	86%
Asian-Other	475	1,330	76%	88%
Korean	837	2,393	76%	86%
Filipino	1,279	3,534	75%	85%
Cambodian	57	122	67%	80%
Laotian	14	34	65%	74%

Most of the Asian subgroups perform within three percentage points of the overall success rate reported for the CCCCO "Asian" ethnic group, and within a total range of five percentage points. This suggests that the average reported for Asian students by the CCCCO is not seriously misrepresenting the performance of all students who identify as Asian.

There are two exceptions. Students who identified as Cambodian or Laotian performed 11 and 13 percentage points below the overall success rate reported for the Asian ethnic group. However, it should be noted that these were also the smallest Asian subgroups, with only 57 and 14 students, respectively.

⁶ Students may be counted in multiple subgroups.

⁷ Not all of the students represented in this table are categorized as Asian by the CCCCO because they may also identify with non-Asian subgroups. The total number of students who identify with an Asian subgroup is 4,674.

Pacific Islander Students

Table 10 presents the same analysis for the CCCCO Pacific Islander group. On average, the success rate for this group (56%) fell below the average for all ECC students (65%). Of the 123 students assigned to this broad category, 61 identified as Pacific Islander-Other and 46 identified as Samoan; therefore, it makes sense that the average for the entire Pacific Islander group would be closest to the success rates for those two subgroups. However, not all Pacific Islander subgroups were underperforming. Guamanian students outperformed the others, but only eight students who identified as Guamanian exclusively identified as Pacific Islander and not with other groups. As previously discussed, Samoan students were among the lowest performing subgroups of all ECC students, which is consistent with the data shown in Table 10.

Number of | Number of Success Retention Students⁸ Grades Rate Rate Guamanian 72% 24 64 86% Hawaiian 143 404 68% 83% PI-Other 403 61% 77% 135 77% **CCCCO Pacific Islander** 123 358 56% 97 Samoan 271 51% 74%

Table 10. Pacific Islander Student Performance, by Ethnic Subgroup

Implications for Student Outreach

The preceding exploratory analysis has provided a more nuanced perspective on the ethnic composition of the ECC student body. We found that the eight ethnic categories generally used to label students may be concealing some greater diversity. Having a broader perspective on ethnic diversity may be particularly relevant to various student outreach efforts. Because a student's affiliation with an Hispanic/Latino group obscures associations they may have with other ethnic groups, we may be overlooking students who could be targeted for group-specific programs. For example, a program targeting African American students in Fall 2014 may have overlooked the 825 students who identified as African American and at least one other ethnic subgroup. By ignoring the subgroup classification, we would have underestimated the number of African American students. Similarly, only 35 students exclusively identified as American Indian or Alaskan Native in Fall 2014. However, when the group was expanded to include those students who also identified with other subgroups, the number of American Indian/Alaskan Native students grew to 576. One caveat here is that the ECC application does not ask students to specify the degree to which they feel connected with each ethnic subgroup they choose, and it is possible that some students who identify with a particular subgroup would not be inclined to attend an event or join a program focused on that ethnicity.

⁸ Students may be counted in multiple subgroups.

Subgroup analysis may be particularly helpful in describing the diversity of Latino and Asian students. Our new understanding of the "Latino" group reveals that it is more diverse than may have been assumed; many students who associate with two or more ethnic subgroups are essentially hiding in the Latino category. We also found significant diversity within the Asian and Pacific Islander categories. The various ethnic subgroups have distinct cultures and students may not identify with other subgroups, even when they fall under the same "Asian" or "Pacific Islander" category. In fact, we found that students who identified as Asian tended to identify with only one Asian subgroup. Therefore, efforts to reach out to different students may be more successful if particular subgroups are targeted, rather than the broader label of "Asian."

Outreach efforts will always rely on students to self-identify and express interest in participating in programming; however, this subgroup analysis helps us size up the entire population of students being targeted.

Implications for Student Outcomes and Equity Research

In the context of student equity research, we are particularly interested in comparing student outcomes across different demographic groups, including ethnicity. One of the objectives of this analysis was to determine if disaggregating data at the ethnic subgroup level would affect our understanding of student outcomes and equity gaps. While it did provide additional insight, especially for some smaller subgroups, this work did not suggest that we have been drawing incorrect conclusions about different ethnic groups. We observed similar inequities in course success and retention rates when outcome data were disaggregated across the eight CCCCO ethnic groups, as well as when the data were further broken down into the 21 ECC ethnic subgroups. For example, the subgroup analysis reinforced what we already knew about equity gaps – that African American and Pacific Islander students were underperforming when compared to other ethnic groups.

Based on these comparisons, it is not necessary to supplement every analysis of student outcomes by ethnicity with detailed results for each of the subgroups. In fact, it is important to continue to use the eight CCCCO ethnic categories to remain consistent with the Student Success Scorecard and to be able to draw comparisons to peer institutions. Further, due to the small population sizes of many of the subgroups, it would not be possible to report outcome data for all subgroups at the course level, or even the department level. Lastly, this analysis is time-consuming and would not be feasible in many situations. Still, it may be useful to conduct this subgroup analysis on a limited basis. For example, if an intervention effort is targeting a particular subgroup, then it may be useful to pull data for that one group.

Recommendations

In conclusion, we found the preceding analysis of student enrollment and outcomes across ethnic subgroups to insightful, but not always necessary. We believe that disaggregating

enrollment data by ethnic subgroup could prove useful for targeting particular student groups in outreach efforts. It broadens our understanding of the diversity of ECC's student body. Further, after exploring how the CCCO classifies students, we may want to be more precise when describing the eight primary ethnic groups, keeping in mind that any student who identifies with one Hispanic/Latino subgroup is automatically categorized as Latino and that the Two or More category does not include any Latino students.

On the other hand, the subgroup-level analysis of student outcome measures did not significantly change our understanding of existing equity gaps. It does not seem necessary to routinely evaluate student outcomes at the subgroup level, as that seems to reinforce what can be clearly seen by comparing the eight ethnic groups defined by the CCCCO. However, it is possible to look at the data for specific subgroups, from time to time, if it would inform the direction of a particular intervention or program.