



Attrition before the Junior Year, Academic Standing, USTU010 and Fiat Lux Scholars

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A summary of several IRDS retention and graduation rate studies¹ made the observation that in spite of freshman to sophomore attrition being the most common, loss from sophomore to junior year is the most costly when the investment made by the student, university, state government and federal government is considered. Simply, even though the number leaving after the sophomore year is less than the number leaving after the freshman year, all constituencies have invested twice the resources that they invested in a student leaving between the freshman and sophomore year. Because the loss is largest for the sophomore to junior transition, this report is focused there. In addition, this report will examine the impact of USTU010 enrollment for first semester students not in academic good standing (Part 1) and for all students but especially Fiat Lux Scholars Program scholars regardless of GPA in the first semester (Part 2).

Part 1

To balance the need for sufficient numbers with the need to consider the most current data possible, this study includes new from high school freshmen enrolling in the Fall of 2010 and 2011. The retention behavior of these 2,784 students was tracked for their first five semesters. The results are displayed as **Table 1** where the columns are ‘retained to the 5th semester,’ ‘dropped between the fourth and 5th semesters’ or ‘dropped before the 4th semester.’ The rows report the academic standing of the students by semester for each semester. Because the columns are based on retention status as of the 5th semester, the column totals do not change. Seventy-two percent were retained to the 5th semester, 7% left between the 4th and 5th semesters, and 21% had left before the 4th semester. The percentages within the table margins are row percentages. For example, using the Academic Standing in 1st semester section, there were 267 students put on probation at the end of the 1st semester. Fifty-five percent of them were retained to the 5th semester, 6% dropped between the 4th and 5th semesters and 39% had dropped before the 4th semester.

¹ Facts about Undergraduate Retention and Graduation Derived from IRDS Projects
IRDS, UC Merced, October 17, 2014.

Most observations confirm the expected patterns. Students in good academic standing were retained at higher rates, students subject to academic dismissal and special probation in the first term were unlikely to reach the 5th semester (66% = 6% + 60%) and none of those facing academic dismissal ever returned and reached even the 4th semester. The most impactful indicator is the retention rate for those in good academic standing, 82%. If students can make it to the end of that 1st semester with a 2.0 GPA, it is likely that they will return for a 5th semester. Of special interest is the high rate of retention to the 5th semester by students on probation. The majority of students on probation at the end of any semester made it to the 5th semester and the retention rates were substantially higher after the first semester. The retention rate of those on probation was closer to those in good academic standing than those subject to dismissal or special probation. In addition, the data suggest that the standards for special probation (the large majority of the subject to dismissal and special probation category) might need to be reconsidered. Before the third semester, retention to the 5th semester was a coin flip or worse.

Research by IRDS has consistently shown that having a declared major in the first term is positively associated with retention and graduation rates. **Table 2** confirms that fact and examines the relationship between retention and departure between sophomore and junior year. The most interesting pattern is the large variance across majors and across schools. They range from very high retention in Environmental Engineering (90%), Earth Systems Science (88%, but only 8 students), Anthropology (87%), Cognitive Science (84%), and Physics (83%); to significantly lower in Computer Science (67%). Students with undeclared majors in Engineering and SSHA were less likely to be retained but undeclared students in Natural Sciences were more likely to be retained. Attrition before the 4th semester was especially high in Sociology (16%), but also higher than average in Cognitive Science, Economics, and Political Science. Of special interest for this report is departure between the sophomore and junior years. Majors with 5% or more loss than the average 21% were Computer Science and Engineering (26%), Undeclared SSHA (28%), and Materials Science and Engineering (29%). An exceptionally low rate of departure between sophomore and junior years was the case for Anthropology (9%), Environmental Engineering (6%), and Cognitive Science (5%). Rates were 5% or more below the average in Earth Systems Science (13% but only 8 students), Physics (13%), and Management (16%). Because high attrition rates occurred in several majors that have higher admissions scores on average, the attrition patterns might reflect something other than unsuccessful academic performance. Because the attrition rate between sophomore and junior years showed great variance by major and because one difference by major is admissions test scores, the next table examines the relationship between admissions scores and attrition patterns.

Table 3 displays the relationship between admissions measures and retention patterns. Quartiles were created for admissions measures to simplify the analysis. Quartiles should place students into four equally-size categories so that there is 25% in each quartile, but quartiles could not be perfectly formed due to distribution patterns for integer-value scores. The expected relationship between admissions scores and attrition patterns would be for students in the lowest quartile to leave at higher rates before the 4th semester and that was true for SAT Total score, SAT Math,

SAT Reading, and SAT Writing. The trend was also apparent for high school GPA although not as pronounced as was true for SAT scores. Most interesting for this report were the patterns seen for departure between the sophomore and junior years. For this transition students in the top quartile were more likely to leave: SAT total (37%), SAT Math (37%), SAT Reading (37%), and SAT Writing (34%). These patterns confirm that departure between the sophomore and junior years is qualitatively different than early attrition and is not likely due to academic difficulty. A significant part of the sophomore to junior transition is by academically able students.

The destination of transferring students is shown in **Table 4**. The most remarkable result shown in Table 4 is the huge number of destination institutions and the low number attending most of the institutions. The two most frequent destinations were Merced College (55) and UC Davis (23). Caution should be used in drawing conclusions and should be limited to totals by institution type or instances with 10 or more students and there were only 11 of those. Overall, 25% of those leaving by the 5th semester did so between the 4th and 5th semesters and 75% left earlier. That was essentially the pattern for those transferring to private four-year institutions, four-year public institutions in other states, and public two-year institutions. The pattern for public four-year institutions in California varied. Those going to California State campuses were more likely to have left before the end of the sophomore year (86%). Those going to other University of California institutions largely did so between the sophomore and junior years, 75% versus 25% overall. This likely reflects the fact that transfer to a UC campus for any student is most likely after the sophomore year.

Collectively, these results suggest that UC Merced was a transfer school for a significant number of the 89 students who went on to other UC campuses. In **Table 5**, the admissions measures of students retained to the 5th semester at UC Merced are compared to those of students who transferred to another UC campus between the sophomore and junior years. The high school GPA of the two groups was the same, but students transferring to other UC campuses had higher SAT Math (+53 points), SAT Reading (+33 points), and SAT Writing (+48 points) scores.

Part 2

The second part of this report will continue examination of the pattern of retention to the 5th semester but will add two programs designed to improve likelihood of academic success: USTU010, Introduction to University Studies, and the Fiat Lux Scholars Program. USTU010 is a one credit, three-hour weekly introduction to college lecture, taught most often by professional staff, that is centered on the student and which emphasizes self-management and personal responsibility, learning effectiveness and study skills, and self-motivation and self-esteem consistent with academic success. The course does not satisfy requirements for any major field of study but does satisfy course credit hour minimums for graduation. It is primarily staffed by Student Affairs units and the curriculum was designed by Student Affairs units. The first section of this part of the report will focus on those students who finished the freshman Fall term with a GPA less than 2.0 (not good academic standing) who then took USTU010 in the spring. The second section of this part of the report will focus on students in Fiat Lux Scholars program. Fiat

Lux is targeted at first-generation and low-income students and most are underrepresented minorities. It is a holistic program of support, enrichment and engagement that demands substantial and sustained commitment by both the student and the University.

Table 6 reports the retention and academic status of new freshmen in 2010 and 2011 who earned a Fall GPA less than 2.0. Retention and academic standing from the 2nd to the 5th semester is reported at the left in Table 6. The columns are those who took USTU010 and those who did not and are reported by percent of the initial cohort and by percentage distribution within the term. For example, looking at the section for retained to 5th semester, it shows that 92 of the original 188 students who took USTU010 in the spring were retained to the 5th semester (49%). Those who did not take USTU010 in the spring were retained to the 5th semester at a higher rate (57% or 131 of the 229 students). However, more of the students who did not take USTU010 in the spring were subject to academic dismissal (4% of the initial 229 or 7% of the 131 in that semester). Regarding academic standing, the results were mixed but certainly did not favor those who took USTU010. In fact, the graduation rate of students who did not take USTU010 was significantly higher (15% versus 6%). This evidence does not support USTU010 in the spring for students not in academic good standing at the end of their first Fall term.

Fiat Lux scholars (**Table 7**) in this study are Pell Eligible, first-generation, largely Hispanic or African-American new freshmen. As a group, their admissions scores are more likely to be midrange on high school GPA and in the lowest quartile on SAT: SAT Total is 50% in bottom quartile, Math is 50% in bottom quartile, Reading is 42% in bottom quartile, and Writing is 36% in bottom quartile.

Ignoring whether students were in USTU010 or not, the left side of **Table 8**, the results show that Fiat Lux students outperformed what would be expected given their admission scores. In terms of mean statistics, Fiat Lux students had high school GPAs equivalent to other students, but SAT scores that were significantly lower. Their SAT Math was 71 points lower on average, SAT reading was 41 points lower, and SAT Writing was 35 points lower on average. However, retention to the 5th semester was equivalent (71% for Fiat Lux and 73% for all others).

When students are placed into one of three categories (right side of Table 8): Fiat Lux and Took USTU010, Other Students in USTU010, and Students Not in USTU010; the pattern of scores and retention again supports Fiat Lux. Fiat Lux students had high school GPAs that were equivalent to students who did not take USTU010 but much lower SAT scores on average. Fiat Lux had higher high school GPAs than other USTU010 students (3.45 versus 3.38) but lower SAT scores on average (SAT Math 42 points lower, SAT reading points 16 lower, and SAT Writing 11 points lower). However, Fiat Lux students were retained to the 5th semester at a much higher rate (70% versus 60%). Again, Fiat Lux students were retained at a rate higher than would otherwise be expected given their admissions scores.

The last table, **Table 9**, returns to the pattern of academic standing over semesters. Given that Fiat Lux students more closely resemble other students who took USTU010 than other students who did not take USTU010, the Fiat Lux advantage is apparent from the first semester. Fiat Lux students were much more likely to finish the first semester in good academic standing and much less likely to be on any type of probation. The rates for Fiat Lux students were not as positive as for other students who did not take USTU010, but the rates were much more positive than for other students who did take USTU010. Over semesters, the relative patterns continued except that Fiat Lux students looked increasingly like the strongest academic group, compared to other students who did not take USTU010, and they were equivalent to those students by the end of the fourth semester. Of course, almost 30% of students not in Fiat Lux, but taking USTU010, finished the first term with a GPA under 2.0, so the fact that Fiat Lux students outperformed other students in USTU010 must be tempered. But they are not the most important comparator for this analysis. The important comparator is the students who did not take USTU010 and were better academically prepared for college than the Fiat Lux Scholars. Over time, the Fiat Lux students looked increasingly like the students who did not take USTU010 – the group with higher admissions scores – and the Fiat Lux students were performing at an equivalent level by the end of the 4th semester.

Following the entering Fall freshmen from 2010 and 2011 for five semesters, the junior year, led to several useful observations:

- Being on academic probation was not debilitating or clearly predictive of failure. Even in the first term, most of those on academic probation reached the 5th semester. In later semesters, the retention rate of those on probation was very similar to the rate for those in good academic standing. In contrast, those on special probation, especially early in their career, were unlikely to be retained.
- UC Merced is a transfer institution for a significant number of academically able students. It would be informative to learn the point in time when the plan to transfer was formed.
- USTU010 was not helpful as an intervention for those finishing the first semester with a GPA < 2.0.
- Fiat Lux Scholars does appear to be a successful enrichment activity. Fiat Lux Scholars were in good academic standing and were retained at rates higher than would be otherwise expected.

Combined with the results from a recent IRDS publication, *On Academic Good Standing and Introduction to University Studies*, that reported a clear advantage associated with small class size sections taught in residence hall locations, it might be the case that altering an expected academic trajectory or changing an academic trajectory that has turned in a negative direction requires an exceptional investment. On the other hand, the investment that might be required to alter the likely trajectory for students facing academic dismissal early in their career might not be justified, and it would be helpful to at least know the investment required to change the trajectory for a student on academic probation in their first or second semester.

Table 1: Academic Good Standing and Retention to the Fifth Semester

	Status at Fifth Semester			Total	Count
	Retained to Fifth Semester	Dropped Between 4th and 5th Semester	Had Dropped Before Fourth Semester		
Academic Standing in First Semester					
Good Standing	82%	7%	11%	79%	2,194
Had Left by End of 1st Term	31%	0%	69%	0%	13
Academic Dismissal	0%	0%	100%	4%	121
Probation	55%	6%	39%	10%	267
Subject to Dismissal and Special Probation	34%	6%	60%	7%	189
Total	72%	7%	21%	100%	2,784
Academic Standing in 2nd Semester					
Good Standing	87%	8%	6%	71%	1,977
Had Left	1%	1%	98%	8%	211
Academic Dismissal	0%	0%	100%	5%	140
Probation	78%	7%	14%	9%	243
Subject to Dismissal and Special Probation	51%	8%	41%	8%	213
Total	72%	7%	21%	100%	2,784
Academic Standing in 3rd Semester					
Good Standing	92%	7%	1%	65%	1,811
Had Left	0%	0%	99%	17%	463
Academic Dismissal	0%	0%	100%	3%	83
Probation	86%	11%	3%	12%	321
Subject to Dismissal and Special Probation	62%	32%	6%	4%	106
Total	72%	7%	21%	100%	2,784
Academic Standing in 4th Semester					
Good Standing	94%	6%	0%	65%	1,821
Had Left	0%	1%	99%	21%	573
Academic Dismissal	0%	97%	3%	1%	38
Probation	89%	9%	1%	10%	290
Subject to Dismissal and Special Probation	76%	23%	2%	2%	62
Total	72%	7%	21%	100%	2,784

Observations: Probation appears to be effective, especially after the first term.

Table 2: Fall 2010 and Fall 2011 Freshman Cohorts to Junior Year

	Retained to Fifth Semester	Dropped Between 4th and 5th Semester	Had Dropped Before Fourth Semester	Total
Undeclared	68%	24%	8%	545
Anthropology	<u>87%</u>	9%	4%	23
Biological Engineering	<u>78%</u>	20%	1%	83
Biological Sciences	72%	22%	6%	742
Chemistry	76%	17%	7%	151
Cognitive Science	<u>84%</u>	5%	11%	38
Computer Science and Engineering	67%	26%	7%	144
Economics	69%	19%	11%	36
Environmental Engineering	<u>90%</u>	6%	4%	48
Earth Systems Science	<u>88%</u>	13%	0%	8
History	76%	22%	2%	41
Literature and Cultures	<u>79%</u>	12%	9%	33
Mathematics	<u>80%</u>	17%	2%	46
Mechanical Engineering	69%	25%	6%	148
Management	75%	16%	9%	92
Materials Science and Engineering	71%	29%	0%	14
Physics	<u>83%</u>	13%	4%	24
Political Science	69%	19%	11%	108
Psychology	76%	18%	7%	245
Sociology	65%	20%	16%	51
Undeclared Engineering	71%	22%	7%	45
Undeclared Natural Science	<u>80%</u>	18%	2%	51
Undeclared Social Sciences, Humanities and Arts	65%	28%	7%	68
Total	72%	21%	7%	2,784

Table 3: Quartile Distributions All New Freshmen in Fall 2010 and 2011

HS GPA	Lowest	Third	Second	Top	
Continued Enrollment	24%	25%	26%	26%	1,982
Dropped So to Jr Year	32%	23%	26%	19%	185
Left Before End of So Year	29%	30%	25%	17%	569
Total	25%	25%	26%	23%	2,736
SAT Total Group					
Continued Enrollment	22%	25%	27%	26%	1,938
Dropped So to Jr Year	18%	21%	24%	37%	187
Left Before End of So Year	35%	24%	21%	20%	542
Total	24%	25%	26%	25%	2,667
SAT Math					
Continued Enrollment	23%	23%	29%	25%	1,937
Dropped So to Jr Year	20%	19%	25%	37%	187
Left Before End of So Year	33%	24%	22%	21%	541
Total	24%	23%	27%	25%	2,665
SAT Reading					
Continued Enrollment	23%	25%	24%	28%	1,938
Dropped So to Jr Year	21%	15%	26%	37%	187
Left Before End of So Year	32%	22%	23%	23%	542
Total	25%	24%	24%	27%	2,667
SAT Writing					
Continued Enrollment	20%	24%	28%	29%	1,938
Dropped So to Jr Year	18%	19%	29%	34%	187
Left Before End of So Year	30%	26%	23%	20%	542
Total	22%	24%	27%	27%	2,667

Observation: Regarding SAT scores, there is an interesting pattern of students with higher scores leaving between SO and JR years and students with lower scores leaving before then. Might be a bifurcated distribution with some better students transferring to competitive campuses and others dropping out or transferring near home.

Table 4: Departure Point, Between Sophomore and Junior Year or Not

	At So to Jr	Earlier	Total
Private 2-Year			
CARRINGTON COLLEGE OF CALIFORNIA-CITRUS HEIGHTS	0%	100%	1 Too Few
CARRINGTON COLLEGE OF CALIFORNIA-SAN JOSE	0%	100%	1 Too Few
CARRINGTON COLLEGE OF CALIFORNIA-SAN LEANDRO	0%	100%	1 Too Few
CARRINGTON COLLEGE OF CALIFORNIA-STOCKTON	0%	100%	1 Too Few
EVEREST COLLEGE - ALHAMBRA	0%	100%	1 Too Few
Total	0%	100%	5
Overall Transferred Out (For Reference)	25%	75%	
Private 4-Year			
AMERICAN PUBLIC UNIVERSITY SYSTEM	0%	100%	1 Too Few
ANTIOCH UNIVERSITY - SEATTLE	0%	100%	1 Too Few
ARGOSY UNIVERSITY - SANTA MONICA	0%	100%	1 Too Few
ARGOSY UNIVERSITY-AI OF CA LOS ANGELES	0%	100%	1 Too Few
AZUSA PACIFIC UNIVERSITY- UNDERGRADUATE	100%	0%	1 Too Few
BERKLEE COLLEGE OF MUSIC	100%	0%	1 Too Few
BIOLA UNIVERSITY	0%	100%	1 Too Few
BROOKS INSTITUTE	0%	100%	1 Too Few
CALIFORNIA BAPTIST UNIVERSITY -UNDERGRADS	67%	33%	3 Too Few
CALIFORNIA COLLEGE OF THE ARTS	0%	100%	1 Too Few
CARNEGIE MELLON UNIVERSITY	0%	100%	1 Too Few
CHAMINADE UNIVERSITY OF HONOLULU	0%	100%	1 Too Few
CHAPMAN UNIVERSITY-ORANGE	0%	100%	1 Too Few
COLUMBIA SOUTHERN UNIVERSITY	0%	100%	1 Too Few
FRESNO PACIFIC UNIVERSITY	0%	100%	2 Too Few
HERITAGE UNIVERSITY	0%	100%	1 Too Few
HUMPHREYS COLLEGE	0%	100%	1 Too Few
ITT TECHNICAL INSTITUTE	100%	0%	1 Too Few
JOHN F KENNEDY UNIVERSITY UNDERGRAD	100%	0%	1 Too Few
LA SIERRA UNIVERSITY	0%	100%	1 Too Few
MILLS COLLEGE	0%	100%	1 Too Few
MOUNT SAINT MARY'S UNIVERSITY	0%	100%	1 Too Few
NATIONAL UNIVERSITY	0%	100%	1 Too Few
POINT LOMA NAZARENE UNIVERSITY	0%	100%	1 Too Few
ST MARY'S COLLEGE OF CALIFORNIA	0%	100%	1 Too Few
UNIVERSITY OF MARY	0%	100%	1 Too Few
UNIVERSITY OF NEW ENGLAND NON-MATRIC	0%	100%	1 Too Few
UNIVERSITY OF PHOENIX	0%	100%	1 Too Few
UNIVERSITY OF SAN FRANCISCO	50%	50%	6 Too Few
UNIVERSITY OF SOUTHERN CALIFORNIA	40%	60%	5 Too Few
UNIVERSITY OF THE PACIFIC	0%	100%	1 Too Few
WEST COAST UNIVERSITY- ANAHEIM	100%	0%	1 Too Few
WEST COAST UNIVERSITY- NORTH HOLLYWOOD	0%	100%	1 Too Few
Total	27%	73%	45
Overall Transferred Out (For Reference)	25%	75%	

Observation: Students transferring to private schools do so at times expected for all students. USC and USF might be exceptions.

Public 2-Year

ALLAN HANCOCK COLLEGE	0%	100%	4 Too Few
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Table 4: Departure Point, Between Sophomore and Junior Year or Not

	At So to Jr	Earlier	Total
AMERICAN RIVER COLLEGE LOS RIOS CC DISTRICT	40%	60%	5 Too Few
ANTELOPE VALLEY COLLEGE	0%	100%	1 Too Few
AUSTIN COMMUNITY COLLEGE	0%	100%	1 Too Few
BAKERSFIELD COLLEGE	20%	80%	5 Too Few
BERKELEY CITY COLLEGE	25%	75%	4 Too Few
BUTTE COLLEGE	0%	100%	2 Too Few
CABRILLO COLLEGE	50%	50%	2 Too Few
CANADA COLLEGE	25%	75%	4 Too Few
CENTRAL TEXAS COLLEGE-TRADITIONAL	0%	100%	1 Too Few
CERRITOS COLLEGE	33%	67%	3 Too Few
CHABOT COLLEGE	25%	75%	4 Too Few
CHAFFEY COMMUNITY COLLEGE	0%	100%	1 Too Few
CITRUS COLLEGE	0%	100%	3 Too Few
CITY COLLEGE OF SAN FRANCISCO	0%	100%	7 Too Few
COLLEGE OF SAN MATEO	0%	100%	3 Too Few
COLLEGE OF THE CANYONS	0%	100%	3 Too Few
COLLEGE OF THE DESERT, COACHELLA	100%	0%	1 Too Few
COLLEGE OF THE REDWOODS	0%	100%	1 Too Few
COLLEGE OF THE SEQUOIAS	0%	100%	4 Too Few
CONTRA COSTA COLLEGE	0%	100%	1 Too Few
COSUMNES RIVER COLLEGE-LOS RIOS CC DISTRICT	60%	40%	5 Too Few
CUESTA COLLEGE	0%	100%	1 Too Few
CUYAMACA COLLEGE	0%	100%	4 Too Few
CYPRESS COLLEGE	33%	67%	3 Too Few
DE ANZA COLLEGE	43%	57%	7 Too Few
DIABLO VALLEY COLLEGE	20%	80%	5 Too Few
EAST LOS ANGELES COLLEGE	0%	100%	7 Too Few
EL CAMINO COLLEGE	50%	50%	4 Too Few
FOOTHILL COLLEGE	0%	100%	4 Too Few
FRESNO CITY COLLEGE	8%	92%	12
FULLERTON COLLEGE	0%	100%	3 Too Few
GLENDALE COMMUNITY COLLEGE	0%	100%	3 Too Few
GOLDEN WEST COLLEGE	0%	100%	1 Too Few
GROSSMONT COLLEGE	0%	100%	2 Too Few
HARTNELL COLLEGE	0%	100%	3 Too Few
HOPKINSVILLE COMMUNITY COLLEGE (KCTCS)	0%	100%	1 Too Few
IMPERIAL VALLEY COLLEGE	0%	100%	1 Too Few
IRVINE VALLEY COLLEGE	0%	100%	2 Too Few
LONG BEACH CITY COLLEGE	0%	100%	3 Too Few
LOS ANGELES CITY COLLEGE	33%	67%	6 Too Few
LOS ANGELES HARBOR COLLEGE	100%	0%	1 Too Few
LOS ANGELES MISSION COLLEGE	0%	100%	4 Too Few
LOS ANGELES PIERCE COLLEGE	0%	100%	3 Too Few
LOS ANGELES SOUTHWEST COLLEGE	25%	75%	4 Too Few
LOS ANGELES TRADE TECHNICAL	0%	100%	2 Too Few
LOS ANGELES VALLEY COLLEGE	0%	100%	1 Too Few
LOS MEDANOS COLLEGE	0%	100%	1 Too Few
MERCED COLLEGE	13%	87%	55
MIRACOSTA COLLEGE	0%	100%	1 Too Few

Table 4: Departure Point, Between Sophomore and Junior Year or Not

	At So to Jr	Earlier	Total
MODESTO JUNIOR COLLEGE	13%	87%	15
MONTEREY PENINSULA COLLEGE	0%	100%	1 Too Few
MOORPARK COLLEGE	0%	100%	1 Too Few
MOUNT SAN ANTONIO COLLEGE	0%	100%	6 Too Few
MT. SAN JACINTO COLLEGE	100%	0%	1 Too Few
NAPA VALLEY COLLEGE	0%	100%	2 Too Few
NORTHWEST ARKANSAS COMMUNITY COLLEGE	0%	100%	1 Too Few
OHLONE COLLEGE	0%	100%	4 Too Few
ORANGE COAST COLLEGE	0%	100%	4 Too Few
OXNARD COLLEGE	0%	100%	3 Too Few
PALOMAR COLLEGE	33%	67%	3 Too Few
PASADENA CITY COLLEGE	0%	100%	3 Too Few
PIERCE COLLEGE	0%	100%	1 Too Few
PORTLAND COMMUNITY COLLEGE	0%	100%	3 Too Few
REEDLEY COLLEGE	50%	50%	6 Too Few
RIO HONDO COLLEGE	0%	100%	4 Too Few
RIVERSIDE COMMUNITY COLLEGE	0%	100%	1 Too Few
SACRAMENTO CITY COLLEGE-LOS RIOS CC DISTRICT	33%	67%	3 Too Few
SADDLEBACK COLLEGE	33%	67%	3 Too Few
SAN DIEGO CITY COLLEGE	0%	100%	3 Too Few
SAN DIEGO MESA COLLEGE	17%	83%	6 Too Few
SAN JACINTO COLLEGE	0%	100%	1 Too Few
SAN JOAQUIN DELTA COLLEGE	14%	86%	7 Too Few
SAN JOSE CITY COLLEGE	0%	100%	2 Too Few
SANTA ANA COLLEGE	50%	50%	2 Too Few
SANTA BARBARA CITY COLLEGE	0%	100%	3 Too Few
SANTA MONICA COLLEGE	18%	82%	11
SANTA ROSA JUNIOR COLLEGE	33%	67%	3 Too Few
SHASTA COLLEGE	100%	0%	1 Too Few
SIERRA COLLEGE	0%	100%	3 Too Few
SKYLINE COLLEGE	0%	100%	1 Too Few
SOLANO COMMUNITY COLLEGE	0%	100%	3 Too Few
SOUTHWESTERN COLLEGE	0%	100%	1 Too Few
SUNY TOMPKINS CORTLAND COMMUNITY COLLEGE	0%	100%	1 Too Few
TAFT COLLEGE	50%	50%	2 Too Few
VENTURA COLLEGE	0%	100%	3 Too Few
WEST HILLS COLLEGE, LEMOORE	50%	50%	2 Too Few
WEST HILLS COMMUNITY COLLEGE	0%	100%	2 Too Few
WEST LOS ANGELES COLLEGE	0%	100%	3 Too Few
WEST VALLEY COLLEGE	0%	100%	1 Too Few
Total	15%	85%	335
Overall Transferred Out (For Reference)	25%	75%	

Public 4-Year

CALIFORNIA POLYTECHNIC STATE UNIVERSITY	0%	100%	3 Too Few
CALIFORNIA STATE POLYTECHNIC	0%	100%	3 Too Few
CALIFORNIA STATE UNIVERSITY - BAKERSFIELD	25%	75%	4 Too Few
CALIFORNIA STATE UNIVERSITY - CHICO	0%	100%	1 Too Few

Table 4: Departure Point, Between Sophomore and Junior Year or Not

	At So to Jr	Earlier	Total
CALIFORNIA STATE UNIVERSITY - DOMINGUEZ HILLS	0%	100%	1 Too Few
CALIFORNIA STATE UNIVERSITY - EAST BAY	20%	80%	5 Too Few
CALIFORNIA STATE UNIVERSITY - FRESNO	25%	75%	8 Too Few
CALIFORNIA STATE UNIVERSITY - FULLERTON	0%	100%	1 Too Few
CALIFORNIA STATE UNIVERSITY - LONG BEACH	7%	93%	14
CALIFORNIA STATE UNIVERSITY - LOS ANGELES	0%	100%	3 Too Few
CALIFORNIA STATE UNIVERSITY - SACRAMENTO	8%	92%	12
CALIFORNIA STATE UNIVERSITY - STANISLAUS	20%	80%	5 Too Few
CALIFORNIA STATE UNIVERSITY - NORTHRIDGE	11%	89%	9 Too Few
HUMBOLDT STATE UNIVERSITY	33%	67%	3 Too Few
SAN DIEGO STATE UNIVERSITY	0%	100%	2 Too Few
SAN FRANCISCO STATE UNIVERSITY	33%	67%	6 Too Few
SAN JOSE STATE UNIVERSITY	17%	83%	6 Too Few
SONOMA STATE UNIVERSITY	0%	100%	1 Too Few
Total	14%	86%	87
Overall Transferred Out (For Reference)	25%	75%	
UNIVERSITY OF CALIFORNIA - BERKELEY	100%	0%	5 Too Few
UNIVERSITY OF CALIFORNIA - IRVINE	50%	50%	12
UNIVERSITY OF CALIFORNIA - RIVERSIDE	60%	40%	5 Too Few
UNIVERSITY OF CALIFORNIA-DAVIS	70%	30%	23
UNIVERSITY OF CALIFORNIA-LOS ANGELES	90%	10%	10
UNIVERSITY OF CALIFORNIA-SAN DIEGO	78%	22%	18
UNIVERSITY OF CALIFORNIA-SANTA BARBARA	100%	0%	10
UNIVERSITY OF CALIFORNIA-SANTA CRUZ	67%	33%	6 Too Few
UC Total	75%	25%	89
Overall Transferred Out (For Reference)	25%	75%	
CUNY BERNARD M. BARUCH COLLEGE	0%	100%	1 Too Few
ARIZONA STATE UNIVERSITY	0%	100%	2 Too Few
DELTA STATE UNIVERSITY	0%	100%	1 Too Few
KENNESAW STATE UNIVERSITY	0%	100%	1 Too Few
ROSS UNIVERSITY SCHOOL OF MEDICINE	100%	0%	1 Too Few
THE OHIO STATE UNIVERSITY	0%	100%	1 Too Few
UNIVERSITY OF IDAHO	100%	0%	1 Too Few
UNIVERSITY OF MARYLAND - UNIVERSITY COLLEGE	0%	100%	1 Too Few
UNIVERSITY OF MICHIGAN	100%	0%	1 Too Few
UNIVERSITY OF MISSOURI-KANSAS CITY	0%	100%	1 Too Few
UNIVERSITY OF NEVADA-RENO	0%	100%	1 Too Few
UNIVERSITY OF NORTH CAROLINA - CHARLOTTE	0%	100%	1 Too Few
UNIVERSITY OF NORTH DAKOTA	0%	100%	1 Too Few
Total	21%	79%	14
Overall Transferred Out (For Reference)	25%	75%	
DID NOT FIND UNIVERSITY OF CALIFORNIA - MERCED	23%	77%	186
RETAINED UNIVERSITY OF CALIFORNIA - MERCED	0%	0%	2,020

Table 5: Students Who Left Between Sophomore and Junior Years (4th and 5th Semesters) to Attend a UC Campus

	Went to another UC	Still Enrolled at UCM
High School GPA (verified by transcripts)	3.47	3.46
SAT Math	579	526
SAT Reading	531	498
SAT Writing	549	501
N	62	1,937

Table 6: These students were in the Fall 2010 or Fall 2011 freshman cohorts and earned < 2.0 GPA in the 1st semester. One group took USTU010 in the Spring, the other did not.

	% of Initial Cohort		Distribution within Term	
	Took USTU 010	Did NOT	Took USTU 010	Did NOT
Retained to 2nd Semester	100%	100%		
Academic Standing in 2nd Semester	188	229	184	226
Good Standing	41%	44%	41%	44%
Academic Dismissal	27%	23%	27%	23%
Probation	2%	2%	2%	2%
Subject to Dismissal and Special Probation	30%	31%	30%	31%
Total				
Retained to 3rd Semester	66%	70%		
Academic Standing in 3rd Semester	125	160	125	160
Good Standing	37%	42%	54%	60%
Academic Dismissal	13%	7%	18%	10%
Probation	10%	10%	15%	14%
Subject to Dismissal and Special Probation	8%	12%	12%	16%
Total				
Retained to 4th Semester	53%	64% *		
Academic Standing in 4th Semester	100	146	99	146
Good Standing	41%	40%	76%	62%
Academic Dismissal	3%	4%	5%	6%
Probation	7%	12%	12%	18%
Subject to Dismissal and Special Probation	4%	9%	7%	14%
Total				
Retained to 5th Semester	49%	57%		
Academic Standing in 5th Semester	92	131	92	131
Good Standing	36%	40%	73%	69%
Academic Dismissal	0%	4%	0%	7%
Probation	10%	10%	21%	17%
Subject to Dismissal and Special Probation	3%	4%	7%	7%
Total				
Four-Year Graduation for Fall 2010 Cohort	6%	15% *		
GPA and End of 1st Term	1.52	1.55		

* A statistically significant difference.

Table 7: Descriptive Statistics for FIAT Lux, USTU 010 and Others

	FIAT Lux	Other USTU	Not in USTU	
Pell Eligible in First Semester				
No	3%	33%	42%	1,096
Yes	97%	67%	58%	1,688
Total	92	444	2,248	2,784
First Generation				
No	2%	32%	44%	1,134
Yes	98%	68%	56%	1,650
Total	92	444	2,248	2,784
First Language				
Another Language	32%	32%	28%	793
English Only	30%	34%	39%	1,065
English and Another Language	38%	35%	33%	926
Total	92	444	2,248	2,784
Gender				
Female	57%	53%	52%	1,463
Male	43%	47%	47%	1,309
Unknown	0%	0%	0%	12
Total	92	444	2,248	2,784
Race/Ethnicity				
International	0%	0%	1%	23
Hispanic	68%	52%	40%	1,186
African-American	20%	9%	5%	179
Asian	4%	24%	28%	750
White	1%	11%	18%	445
Multiracial	5%	3%	5%	136
Unknown	1%	0%	2%	49
Total	92	444	2,248	2,784
High School GPA Quartile (Inverse Order)				
a_4th (Lowest)	16%	28%	25%	691
b_3rd	28%	29%	25%	696
c_2nd	37%	27%	25%	710
d_1st (Highest)	18%	16%	25%	639
Total	92	437	2,207	2,736
SAT Total Group (Inverse Order)				
a_4th (Lowest)	50%	33%	21%	644

Table 7: Descriptive Statistics for FIAT Lux, USTU 010 and Others

	FIAT Lux	Other USTU	Not in USTU	
b_3rd	20%	30%	24%	657
c_2nd	25%	20%	27%	690
d_1st (Highest)	5%	17%	28%	676
Total	88	424	2,155	2,667
SAT Math (Inverse Order)				
a_4th (Lowest)	50%	34%	22%	651
b_3rd	31%	25%	22%	618
c_2nd	14%	26%	28%	729
d_1st (Highest)	6%	16%	28%	667
Total	88	423	2,154	2,665
SAT Reading (Inverse Order)				
a_4th (Lowest)	42%	34%	23%	669
b_3rd	22%	29%	23%	636
c_2nd	24%	17%	25%	629
d_1st (Highest)	13%	21%	29%	733
Total	88	424	2,155	2,667
SAT Writing (Inverse Order)				
a_4th (Lowest)	36%	30%	19%	575
b_3rd	24%	27%	24%	642
c_2nd	25%	24%	28%	718
d_1st (Highest)	15%	19%	30%	732
Total	88	424	2,155	2,667

Observation: With few exceptions, Fiat Lux students are nonwhite or Asian, first-generation, Pell eligible students with relatively stronger high school GPAs than SAT test scores.

Table 8

	Ignoring USTU 010		Noting USTU 010		
	Not in Fiat Lux	Fiat Lux	Fiat Lux & USTU010	Other USTU010	Not in USTU010
gpa_hs_verified	3.44	3.46	3.45	3.38	3.45
satrmath	524	453	454	496	529
satreading	496	456	455	471	501
satwriting	499	464	465	476	503
Number with HS GPA	2,639	97	92	437	2,207
Actual Retention to Jr Year	73%	71%	70%	60%	76%

Observations: It is unfortunate that the ability to predict retention is fairly inaccurate. That said, Fiat Lux students appear to perform much better than other students in USTU 010 in spite of having lower SAT scores.

Table 9: First Four Semesters, USTU and Fiat

	Engagement in USTU 010			
	Fiat Lux	Other USTU	Not in USTU	
Academic Standing in First Semester				
Have Left	0%	0%	1%	13
Good Standing	77%	48%	85%	2,194
Academic Dismissal	0%	3%	5%	121
Probation	11%	28%	6%	267
Special Probation	12%	21%	4%	189
Total	92	444	2,248	2,784
Academic Standing in 2nd Semester				
Have Left	2%	7%	8%	211
Good Standing	68%	55%	74%	1,977
Academic Dismissal	8%	14%	3%	140
Probation	10%	8%	9%	243
Special Probation	12%	17%	6%	213
Total	92	444	2,248	2,784
Academic Standing in 3rd Semester				
Have Left	14%	26%	15%	463
Good Standing	60%	49%	68%	1,811
Academic Dismissal	5%	7%	2%	83
Probation	15%	11%	11%	321
Special Probation & Dismissal	5%	7%	3%	106
Total	92	444	2,248	2,784
Academic Standing in 4th Semester				
Have Left	20%	35%	18%	573
Good Standing	65%	52%	68%	1,821
Academic Dismissal	4%	2%	1%	38
Probation	8%	9%	11%	290
Special Probation & Dismissal	3%	2%	2%	62
Total	92	444	2,248	2,784

Observation: Note similarity of FIAT LUX and students not taking USTU 010.