

**UC Merced Summer Bridge Program:**

**2010 Evaluation Report**

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# Introduction

The UC Merced Summer Bridge program was crafted with the intent of improving retention and increasing academic success among a specifically targeted group of students within the California Central Valley that UC Merced serves. The Central Valley is a largely rural region of the state, with high proportions of Hispanic families, and a large proportion of lower-performing public K-12 schools (as measured by statewide standardized tests). While initially the program specifically targeted Hispanic students, the focus has expanded to include a wider diversity of students whose families have little or no history of college attendance. The intention is to provide additional support to these students, who may need more assistance in acculturating to the University than would be true of students from families with more college-going experience.

Students start the UC Merced Summer Bridge program in the summer before their freshman year of college and are provided intensive assistance in writing, and more recently math, to enable them to start their University career on a more level playing field with other UC Merced freshmen. As part of its commitment to providing students with the best possible program, the Summer Bridge program evaluates its effectiveness in achieving its mission with each cohort of students. Annual reports provided by the UC Merced Bridge Program staff detail the specifics of the program and provide formative evaluation information. Although it is recognized that a “successful” college experience is comprised of many more aspects than GPA and continuous enrollment, this evaluation focuses on these very basic aspects of students’ lives that are quantifiable and readily accessible, and provides summative evaluation information regarding student persistence and performance.

# Student Demographics

A federally designated Hispanic Serving Institution, UC Merced serves a student population with a high degree of social, ethnic and economic diversity. There is no majority ethnic group at the university; since 2007, entering freshman classes have been comprised of approximately 1/3 Hispanic students, 1/3 Asian students, and 1/3 students of other ethnicities, including White and African American. More than half (54%) of entering freshman since 2007 are the first in their families to go to college, and 16% learned another language before learning English. Within this student population, students selected for Summer Bridge represent students believed to have a higher risk of dropping out than their peers.

Summer Bridge participants have a significantly higher proportion of first generation college going students than the general UC Merced population – 81% compared to 54%. Also, a significantly higher proportion of Summer Bridge participants (40% compared to 16%) first learned to communicate in a language other than English. Finally, a higher proportion of Summer Bridge participants were admitted to the university by exception – an admissions category for disadvantaged students who demonstrate high potential yet do not meet the university’s strict numerical criteria for admission. Table 1 provides a comparison of student demographics among Summer Bridge participants from 2007 to 2010 and their peers.

Participation in Summer Bridge has grown from 9 students in the summer of 2007 to 38 students in the summer of 2010 for a total of 98 program participants. More than half of the program participants (63%) are Hispanic in ethnicity, with Asian students comprising the next largest group (28%). The comparison group (see below) has an identical proportion of Hispanic students (63%), and a similar proportion of Asian students (26%). Since 2007, the proportion of Asian students participating in Summer Bridge has grown from 0% in 2007 to 34% in 2010. Additional cohort detail may be found in Appendix A. Student Demographics by Cohort.

## Comparison Group Selection

In order to measure the impact of the UC Merced Summer Bridge program, achievement and persistence data were analyzed for program participants, all non-participating UC Merced students, and a smaller “comparison group” comprised of UC Merced students with similar demographic characteristics to Summer Bridge program participants. Comparison group students were selected based on similarity to Summer Bridge students in all of the following areas:

* Gender (Male/Female)
* Ethnicity (Hispanic, Asian, Other)
* First language (English Only, English and Another Language, Another Language)
* High school GPA
* Composite SAT scores (Reading, Writing, and Math)
* Admit type (Regular Admit, Admitted by Exception, or Referral Admit)

There are currently four cohorts involved in the study: those that entered UC Merced as freshman in Fall 2007, Fall 2008, Fall 2009 and Fall 2010. Table 1 describes students in terms of these characteristics among all four cohorts of Summer Bridge participants, comparison group students, and all students at UC Merced who were not part of the Summer Bridge program.

Table . Student Demographics

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Summer Bridge****2007-08 through 2010-11** | **Comparison Group****2007-08 through 2010-11** | **All Other UCM\*****2007-08 through 2010-11** |
|  | N | % | N | % | N | % |
| Total Students | 98 |   | 385 |   | 3965 |   |
| **Ethnicity** |   |   |   |   |   |   |
| Hispanic | 62 | 63%b | 244 | 63% | 1409 | 36%b |
| Asian | 27 | 28% | 102 | 26% | 1212 | 31% |
| All Other | 9 | 9% | 40 | 10% | 1344 | 34% |
| **Gender** |   |   |   |   |   |   |
| F | 55 | 56% | 195 | 51% | 1991 | 50% |
| M | 43 | 44% | 191 | 49% | 1959 | 49% |
| **First Language** |   |   |   |   |   |   |
| Another Language | 39 | 40%b | 129 | 33% | 644 | 16% b |
| English and Another Language | 48 | 49% | 190 | 49% | 1600 | 40% |
| English Only | 11 | 11%b | 67 | 17%c | 1717 | 43%bc |
| **Admit Type** |   |   |   |   |   |   |
| Regular | 67 | 68%a\*b | 305 | 79%a\* | 3185 | 80%b |
| Admitted by Exception | 27 | 28%ab | 52 | 13%ac | 317 | 8%bc |
| Referral Admit | 4 | 4%b | 29 | 8%c | 460 | 12%bc |
| **High School Preparation** |   |   |   |   |   |   |
| Regular | 67 | 68%a\*b | 305 | 79%a\* | 3185 | 80%b |
| Admitted by Exception | 27 | 28%ab | 52 | 13%ac | 317 | 8%bc |
| Referral Admit | 4 | 4%b | 29 | 8%c | 460 | 12%bc |
| **Other** |   |   |   |   |   |   |
| First Generation College-going | 79 | 81%b | 318 | 82% | 2128 | 54%b |
| Single Parent Household | 18 | 18% | 66 | 17% | 788 | 20% |

\*Includes students not enrolled in Summer Bridge, including those in the comparison group

astatistically significant difference between Summer Bridge and Comparison Group (p≤.05)

a\*suggested statistically significant difference between Summer Bridge and Comparison Group (p≤.06)

bstatistically significant difference between Summer Bridge and All UC Merced (p≤.05)

Despite painstaking efforts to create a group of students comparable to each Summer Bridge cohort, the comparison group nevertheless differs significantly from Summer Bridge participants in the proportion of students admitted by exception. Nevertheless, the majority of Summer Bridge, comparison group, and all UC Merced students are regular admits to the university.

## High School Preparation

In order to measure students’ high school preparation, high school GPA and SAT scores were included in the analysis.

Table . Student High School Preparation

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Summer Bridge** | **Comparison Group** | **All Other UCM\*** |
| Avg. HS GPA | 3.46 | 3.44 | 3.44 |
| % with SAT Scores | 89% | 93% | 96% |
| Avg. SAT Reading | 423ab | 458a | 505b |
| Avg. SAT Writing | 425ab | 460a | 505b |
| Avg. SAT Math | 452ab | 487a | 532b |

\*Includes students not enrolled in Summer Bridge, including those in the comparison group

a statistically significant difference between Summer Bridge and comparison group (p≤.05)

b statistically significant difference between Summer Bridge and All UC Merced (p≤.05)

Interestingly, students in Summer Bridge have an average GPA that is nearly identical to all other students at UC Merced, as well as to the comparison group. Average SAT scores, however, indicate a gap between program participants and both the comparison group and all other UC Merced students in reading, writing, and math achievement. For more detailed information please see Appendix B. Student High School Preparation by Cohort.

# Academic Progress

To measure the academic progress of Summer Bridge participants several factors were examined including: the average number of credits attempted, average number of credits completed, and student persistence, as measured by continuous enrollment. The average number of credits attempted gives an indication of whether students in this study are attempting a reasonable course load. The average number of credits earned indicates the actual progress towards graduation. The percent of credits completed, the quotient of credits completed divided by credits attempted, indicates whether students are appropriately gauging their academic workload capacities.

## Credit Hours Earned

Table 3 below details the average number of credit hours attempted and earned by each Summer Bridge, comparison group, and all UC Merced students for each year of students’ enrollment at UC Merced. Year 1 refers to the freshman year, Year 2 refers to the subsequent year, and so on, such that the Year indicates time since initial enrollment, and not necessarily the students’ tenure at the university. This allows for easy visual comparison of outcomes for 1st year students in all cohorts, 2nd year students in all cohorts, etc. Hours attempted and hours earned are reported as a group average for students completing any credit hours during the referenced school year.

Table . Credit Hours Attempted/Earned by Year in School1

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Summer Bridge** | **Comparison Group** | **All Other UCM\*** |
| **Year 1 (2007, 2008, 2009, and 2010 Cohorts)** |
| N | 98 | 385 | 3958 |
| Avg. Hours Attempted | 32ab | 28a | 29b |
| Avg. Hours Earned | 27a | 24a | 25 |
| **Year 2 (2007, 2008, and 2009 Cohorts)** |
| N | 47 | 195 | 2251 |
| Avg. Hours Attempted | 29 | 31 | 30 |
| Avg. Hours Earned | 25ab | 28a | 28b |
| **Year 3 (2007 and 2008 Cohorts)** |
| N | 23 | 123 | 1132 |
| Avg. Hours Attempted | 32 | 31 | 32 |
| Avg. Hours Earned | 27 | 29 | 30 |
| **Year 4 (2007 Cohort)** |
| N | 5 | 35 | 420 |
| Avg. Hours Attempted | 34a | 29a | 31 |
| Avg. Hours Earned | 33 | 27 | 29 |

1Includes students who completed each school year

\*Includes students not enrolled in Summer Bridge, including those in the comparison group

a statistically significant difference between Summer Bridge and comparison group (p≤.05)

b statistically significant difference between Summer Bridge and All UC Merced (p≤.05)

Table 3 above indicates that in their first year, Bridge students attempted and completed significantly more credit hours than students in the comparison group. Compared to all other UC Merced students, Bridge students attempted significantly more credit hours in the first year, and while the average number of credit hours earned was more than their peers, the difference was not statistically significant. Outcomes seemed to reverse in Year 2, when the average credit hours attempted and earned were significantly less for Bridge students than their peers in the comparison group. In year 3 there were no significant differences between Bridge students and the comparison group or all other UC Merced students. For the small cohort of students with year 4 data, those in the Summer Bridge program attempted significantly more credit hours than their peers in the comparison group, and while the average number of credit hours earned was more than both the comparison group and all other students at UC Merced, the difference was not statistically significant.

UC Merced academic policy states that students who earn fewer than 24 units during an academic year are subject to administrative probation. On average, Summer Bridge students exceeded the 24 unit minimum each year of enrollment. The comparison of credit hours earned is illustrated in Chart 1 below.

Chart . Average Credit Hours Earned by School Year

Year 1 is the only data point comprising students of all four cohorts (2007, 2008, 2009 and 2010). In their first year at the university in the wake of the primary intervention, Summer Bridge students earned significantly more credit hours than their peers in the comparison group. In order to better understand whether this finding generalized to each cohort, Chart 2 below illustrates the number of credit hours earned in Year 1 by cohort.

Chart 2. Year 1 Average Credit Hours Earned by Cohort

Examining credits earned in year 1 brings to light a positive trend in academic progress from the earlier to the later Summer Bridge cohorts. While the 2007 Summer Bridge cohort earned fewer credits in Year 1 than other UC Merced students, the 2008 cohort earned a similar number of credits as both the comparison group and all other UC Merced students. The 2009 cohort earned significantly more credit hours than their peers in the comparison group, and the 2010 cohort earned significantly more credit hours than both the comparison group and all other students at UC Merced. An alternate way of looking at this trend is illustrated below in Chart 3. Difference in Year 1 Credit Hours Earned.

Chart 3. Difference in Year 1 Credit Hours Earned

Additional detail regarding student performance by cohort is available in Appendix C. Average Credit Hours Attempted and Earned by Year and Cohort.

## Student Persistence

As the population served by the Summer Bridge program is considered at high-risk for dropping out of college prior to completing their undergraduate education, one of the goals of the program is to support students to persist in their studies at the university. Table 4 below combines all cohorts for a summary of student persistence for each year of enrollment.

Table 4. Student Persistence by School Year

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Summer Bridge****N****(%)** | **Comparison Group****N****(%)** | **All Other UCM****N****(%)** |
| **Year 1 (2007, 2008, 2009, and 2010 Cohorts)** |
| Fall Year 1 | 98(100%) | 385(100%) | 3965(100%) |
| Spring Year 1 | 88(90%) | 352(91%) | 3725(94%) |
| **Year 2 (2007, 2008, and 2009 Cohorts)** |
| Original N | 59(100%) | 253(100%) | 27130(100%) |
| Fall Year 2 | 45(76%) | 194(77%) | 2233(84%) |
| Spring Year 2 | 43(73%) | 189(75%) | 2144(81%) |
| **Year 3 (2007 and 2008 Cohorts)** |
| Original N | 30(100%) | 167(100%) | 1564(100%) |
| Fall Year 3 | 23(77%) | 119(71%) | 1109(71%) |
| Spring Year 3 | 22(73%) | 116(69%) | 1073(69%) |
| **Year 4 (2007 Cohort)** |
| Original N | 9(100%) | 44(100%) | 66(100%) |
| Fall Year 4 | 5(56%) | 35(80%) | 409(62%) |
| Spring Year 4 | 5(56%) | 32(73%) | 390(59%) |

There were no significant differences between Summer Bridge and the comparison group or Summer Bridge and all other UCM students. Detail of retention by cohort is provided in Appendix D. Student Retention by Cohort.

# Academic Outcomes

Grade point average (GPA) is a typical measure of academic success that indicates students’ level of mastery of college level material. In order to control for student attrition and minimize the weight of prior years’ performance, GPA is analyzed for each year in school instead of cumulatively (career GPA).

Table 5. GPA by Year

|  |  |  |  |
| --- | --- | --- | --- |
|  | Summer Bridge | Comparison Group | All Other UCM\* |
| Year 1 GPA | 2.12ab | 2.31a | 2.53b |
| Year 2 GPA | 2.22ab | 2.48a | 2.59b |
| Year 3 GPA | 2.27b | 2.61 | 2.68b |
| Year 4 GPA | 2.56 | 2.83 | 2.85 |

\*Includes students not enrolled in Summer Bridge, including those in the comparison group

a statistically significant difference between Summer Bridge and comparison group (p≤.05)

b statistically significant difference between Summer Bridge and All UC Merced (p≤.05)

Although the data in Table 5 seem to indicate that Summer Bridge students lag behind students in the comparison group and other UCM students each year, this does not tell the full story of Bridge student achievement. When GPA is examined by cohort, it becomes evident that, with one exception, each cohort closes the gap between it and all other students at UC Merced as it progresses through the years. Table 6 and Chart 4 below display the gap between Bridge and all other UCM students by year and cohort for all cohorts with more than 1 year of data (2007, 2008, and 2009).

Table 6. Gap in GPA between Bridge and All Other UCM Students by Cohort and Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   |   | Year 1 GPA | Year 2 GPA | Year 3 GPA | Year 4 GPA |
| 2007 Cohort |
| Summer Bridge | Mean GPA | 1.99 | 1.89 | 2.37 | 2.56 |
|  | N | 9 | 6 | 6 | 5 |
| All Other UCM | Mean GPA | 2.47 | 2.55 | 2.70 | 2.85 |
|  | N | 654 | 528 | 452 | 419 |
| Gap | **Mean GPA** | **0.47** | **0.66** | **0.33** | **0.30** |
| 2008 Cohort |
| Summer Bridge | Mean GPA | 1.99 | 2.13 | 2.24 |  |
|  | N | 21 | 16 | 17 |  |
| All Other UCM | Mean GPA | 2.51 | 2.59 | 2.67 |  |
|  | N | 895 | 754 | 678 |  |
| Gap | **Mean GPA** | **0.52** | **0.47** | **0.43** |  |
| 2009 Cohort |
| Summer Bridge | Mean GPA | 2.09 | 2.35 |  |  |
|  | N | 29 | 25 |  |  |
| All Other UCM | Mean GPA | 2.51 | 2.61 |  |  |
|  | N | 1094 | 962 |  |  |
| Gap | **Mean GPA** | **0.43** | **0.26** |  |  |
| 2010 Cohort |
| Summer Bridge | Mean GPA | 2.25 |  |  |  |
|  | N | 39 |  |  |  |
| All Other UCM | Mean GPA | 2.57 |  |  |  |
|  | N | 1296 |  |  |  |
| Gap | **Mean GPA** | **0.33** |  |  |  |
|  |  |  |  |  |  |

Chart 4. Gap in Annual GPA - Summer Bridge v. All Other UCM Students

As displayed in Chart 4 above, Summer Bridge students in each cohort drew nearer the average GPA of their UCM classmates each year they remained enrolled. The only exception is Year 2 for the first (2007) cohort, where the gap between Summer Bridge and all other UCM students grew from 0.47 in Year 1 to 0.66 in Year 2. That same cohort produced a dramatic narrowing of the gap the subsequent year, from 0.66 to 0.33. While it is true that the academically weaker students in Summer Bridge are less likely to persist, the similar retention rates among Summer Bridge and all UCM students indicate that attrition of weaker students similarly affects both groups (see Table 4. Student Persistence by School Year and Table 5. GPA by Year)

In addition to the annual GPA, students’ grades in three required courses are examined – Core 001, Writing 001, and Writing 010. Though these courses are required, students are not obligated to take all of them in Year 1. Student grades in this analysis include the course grade without regard to the semester or school year when the course was taken except in the case of students who took a course multiple times – the earliest grade was used in this analysis. In addition to student grades in these required courses, an analysis of student pass rates was undertaken as it indicates achievement of the minimum acceptable level of course content mastery. “Passing” the course is defined as earning a grade of “D” or better. Table 7 and Chart 5 summarize student performance in required courses. For additional detail by cohort, please see Appendix E. Student Achievement in Required Courses by Cohort.

Table 7. Achievement in Required Courses

|  |  |  |  |
| --- | --- | --- | --- |
|  | Summer Bridge | Comparison Group | All Other UCM\* |
| Writing 001 |
| N |  95 | 292 | 2352 |
| GPA | 3.04 | 2.90 | 2.98 |
| Pass Rate | 98% | 94% | 96% |
| Writing 010 |
| N | 85 | 286 | 3072 |
| GPA | 2.50ab | 2.89a | 3.01b |
| Pass Rate | 88%ab | 98%a | 97%b |
| Core 001 |
| N | 88 | 307 | 3313 |
| GPA | 2.58b | 2.73 | 2.84b |
| Pass Rate | 89% | 94% | 95% |

\*Includes students not enrolled in Summer Bridge, including those in the comparison group

a statistically significant difference between Summer Bridge and comparison group (p≤.05)

b statistically significant difference between Summer Bridge and All UC Merced (p≤.05)

Chart 5. Student GPA in Required Courses

On average, Summer Bridge students passed Writing 001 and Core 001 at a similar rate as both the comparison group and all other UCM students. Summer Bridge students completing Writing 010, however, passed at a lower rate than their peers both in the comparison group and UCM as a whole. Writing 001 was the only course for which the average GPA of Summer Bridge students was not significantly different from that of all other UCM students. For additional detail by cohort, please see Appendix E. Student Achievement in Required Courses by Cohort.

# Conclusion

In evaluating the impact of the Summer Bridge program, it is critical to keep in mind the target population of the program and the program goals. Students who participated in the program were not more likely to remain enrolled than other students at UC Merced, nor did they have higher GPAs than their peers; however, the students targeted for these programs were not randomly selected – they were those who were considered to be at high risk for not completing their undergraduate degrees. That the students selected for the Summer Bridge program persisted in their education in roughly in the same proportions as their peers is evidence that the goals of the program have been met. In addition, Summer Bridge students pass some key required courses (Core 001 and Writing 001) at the same rates as all other UCM students. While Summer Bridge students tended to earn annual GPAs slightly lower than their peers, the gap between program participants and their peers tends to shrink each year students persist in their education.

Not only did Summer Bridge students seem to improve over time, closing the achievement gap with other UCM students, the program itself seemed to improve each year. Each cohort earned a higher average GPA in its respective year in school (Year 1, Year 2, etc.) than the cohort that preceded it.

Student achievement and persistence data represent a limited picture of program effectiveness, though in this case a positive one. Other important considerations in the evaluation of the effect and overall value of the program are the ways in which students have built networks of upwardly mobile peers, learned about post-graduate career and academic options, and committed themselves to helping other students overcome challenges similar to the ones they themselves faced upon matriculation. These issues have been addressed, according to program staff, through focus groups, surveys, and informal feedback, and should be taken into account along with the data analysis provided in this report for a full picture program impacts and benefits.

#

# Appendix A. Student Demographics by Cohort

|  |  |  |
| --- | --- | --- |
|  | **2007 Cohort** | **2008 Cohort** |
|   | Bridge  | Comparison Group  | All Other UCM  | Bridge  | Comparison Group  | All Other UCM  |
|   | N | % | N | % | N | % | N | % | N | % | N | % |
| Total Students | 9 |   | 44 |   | 660 |   | 21 |   | 123 |   | 904 |   |
| **Ethnicity** |  |  |
| Hispanic | 7 | 78% | 35 | 80% | 218 | 33% | 11 | 52% | 72 | 59% | 289 | 32% |
| Asian, Not Hispanic | 0 | 0% | 6 | 14% | 209 | 32% | 6 | 29% | 23 | 19% | 288 | 32% |
| All Other | 2 | 22% | 3 | 7% | 233 | 35% | 4 | 19% | 28 | 23% | 327 | 36% |
| **Gender** |  |  |
| F | 4 | 44% | 19 | 43% | 310 | 47% | 9 | 43% | 43 | 35% | 423 | 47% |
| M | 5 | 56% | 25 | 57% | 350 | 53% | 12 | 57% | 80 | 65% | 478 | 53% |
| **First Language** |  |  |
| Another Language | 6 | 67% | 22 | 50% | 107 | 16% | 7 | 33% | 30 | 24% | 149 | 16% |
| English and Another Language | 3 | 33% | 22 | 50% | 227 | 34% | 9 | 43% | 50 | 41% | 350 | 39% |
| English Only | 0 | 0% | 0 | 0% | 325 | 49% | 5 | 24% | 43 | 35% | 405 | 45% |
| **Admit Type** |  |  |
| Regular | 6 | 67% | 41 | 93% | 515 | 78% | 12 | 57% | 102 | 83% | 721 | 80% |
| Admitted by Exception | 3 | 33% | 2 | 5% | 53 | 8% | 9 | 43% | 15 | 12% | 112 | 12% |
| Referral Admit | 0 | 0% | 1 | 2% | 92 | 14% | 0 | 0% | 6 | 5% | 71 | 8% |
| **Family Characteristics** |  |  |
| First Generation College-going | 9 | 100% | 44 | 100% | 340 | 52% | 14 | 67% | 92 | 75% | 475 | 53% |
| Single Parent Household | 0 | 0% | 2 | 5% | 126 | 19% | 4 | 19% | 12 | 10% | 155 | 17% |

|  |  |  |
| --- | --- | --- |
|  | **2009 Cohort** | **2010 Cohort** |
|  | **Bridge** | **Comparison Group** | **All Other UCM** | **Bridge** | **Comparison Group** | **All Other UCM** |
|  | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
| Total Students | 29 |   | 86 |   | 1099 |   | 39 |   | 132 |   | 1302 |   |
| **Ethnicity** |  |  |
| Hispanic | 20 | 69% | 59 | 69% | 381 | 35% | 24 | 62% | 77 | 58% | 521 | 40% |
| Asian, Not Hispanic | 8 | 28% | 26 | 30% | 364 | 33% | 13 | 33% | 47 | 36% | 351 | 27% |
| All Other | 1 | 3% | 1 | 1% | 354 | 32% | 2 | 5% | 8 | 6% | 430 | 33% |
| **Gender** |  |  |
| F | 16 | 55% | 49 | 57% | 578 | 53% | 26 | 67% | 83 | 63% | 680 | 52% |
| M | 13 | 45% | 37 | 43% | 516 | 47% | 13 | 33% | 49 | 37% | 615 | 47% |
| **First Language** |  |  |
| Another Language | 10 | 34% | 30 | 35% | 166 | 15% | 16 | 41% | 46 | 35% | 222 | 17% |
| English and Another Language | 17 | 59% | 50 | 58% | 468 | 43% | 19 | 49% | 68 | 52% | 555 | 43% |
| English Only | 2 | 7% | 6 | 7% | 464 | 42% | 4 | 10% | 18 | 14% | 523 | 40% |
| **Admit Type** |  |  |
| Regular | 22 | 76% | 73 | 85% | 888 | 81% | 27 | 69% | 89 | 67% | 1061 | 81% |
| Admitted by Exception | 6 | 21% | 8 | 9% | 105 | 10% | 9 | 23% | 26 | 20% | 47 | 4% |
| Referral Admit | 1 | 3% | 5 | 6% | 105 | 10% | 3 | 8% | 17 | 13% | 192 | 15% |
| **Family Characteristics** |  |  |
| First Generation College-going | 24 | 83% | 68 | 79% | 567 | 52% | 32 | 82% | 114 | 86% | 746 | 57% |
| Single Parent Household | 7 | 24% | 23 | 27% | 217 | 20% | 7 | 18% | 29 | 22% | 290 | 22% |

# Appendix B. Student High School Preparation by Cohort

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cohort** | **2007** | **2008** | **2009** | **2010** |
| **Group** | **Summer Bridge** | **Comparison Group** | **All UC Merced** | **Summer Bridge** | **Comparison Group** | **All UC Merced** | **Summer Bridge** | **Comparison Group** | **All UC Merced** | **Summer Bridge** | **Comparison Group** | **All UC Merced** |
| Avg. HS GPA | 3.55 | 3.57 | 3.47 | 3.35 | 3.33 | 3.42 | 3.50 | 3.49 | 3.44 | 3.47 | 3.48 | 3.45 |
| % with SAT Scores | 89% | 86% | 95% | 100% | 89% | 95% | 83% | 94% | 98% | 89% | 99% | 96% |
| Avg. SAT Reading | 401ab | 466a | 513b | 433ab | 481a | 509ab | 390ab | 444 | 507b | 444b | 444 | 498b |
| Avg. SAT Writing | 405ab | 461a | 544b | 440b | 471 | 537ab | 388ab | 450 | 533b | 446b | 457 | 522b |
| Avg. SAT Math | 456b | 499 | 510b | 452ab | 507a | 504ab | 430ab | 474 | 507b | 467b | 475 | 501b |

a statistically significant difference between Summer Bridge and comparison group (p≤.05)

b statistically significant difference between Summer Bridge and All UC Merced (p≤.05)

# Appendix C. Average Credit Hours Attempted and Earned by Year and Cohort

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cohort** | **2007 Cohort** | **2008 Cohort** | **2009 Cohort** | **2010 Cohort** |
| **Group** | **Bridge** | **Comparison Group** | **All Other UCM** | **Bridge** | **Comparison Group** | **All Other UCM** | **Bridge** | **Comparison Group** | **All Other UCM** | **Bridge** | **Comparison Group** | **All Other UCM** |
| **Year 1** |  |  |  |  |
| Hours Attempted | 27 | 29 | 29 | 30 | 28 | 29 | 32a | 28a | 29 | 34ab | 28a | 28b |
| Hours Earned | 20b | 25 | 25b | 23 | 23 | 25 | 27 | 24 | 25 | 30ab | 25a | 26b |
| **Year 2** |  |  |  |  |
| Hours Attempted | 27a | 31a | 30 | 31 | 31 | 31 | 28 | 30 | 31 |
| Hours Earned | 20ab | 28a | 27b | 25 | 27 | 27 | 26 | 28 | 28 |
| **Year 3** |  |  |  |
| Hours Attempted | 29 | 31 | 32 | 33 | 31 | 32 |
| Hours Earned | 24 | 29 | 29 | 28 | 29 | 30 |
| **Year 4** |  |  |
| Hours Attempted | 34ab | 29a | 31b |
| Hours Earned | 33 | 27 | 29 |

a statistically significant difference between Summer Bridge and comparison group (p≤.05)

b statistically significant difference between Summer Bridge and All UC Merced (p≤.05)

# Appendix D. Student Retention by Cohort

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |   | 2007 | 2008 | 2009 | 2010 | All Cohorts |
|   |  | Summer Bridge | Comparison Group | All Other UCM | Summer Bridge | Comparison Group | All Other UCM | Summer Bridge | Comparison Group | All Other UCM | Summer Bridge | Comparison Group | All Other UCM | Summer Bridge | Comparison Group | All Other UCM |
| Year 1 Fall | n | 9 | 44 | 660 | 21 | 123 | 904 | 29 | 86 | 1099 | 39 | 132 | 1302 | 98 | 385 | 3965 |
| %  | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Year 1 Spring  | n | 7 | 39 | 600 | 19 | 112 | 853 | 26 | 79 | 1049 | 36 | 122 | 1223 | 88 | 352 | 3725 |
| %  | 78% | 89% | 91% | 90% | 91% | 94% | 90% | 92% | 95% | 92% | 92% | 94% | 90% | 91% | 94% |
| Year 2 Fall  | n | 6 | 37 | 523 | 16 | 90 | 751 | 23 | 67 | 959 |  |  |  | 45 | 194 | 2233 |
| %  | 67% | 84% | 79% | 76% | 73% | 83% | 79% | 78% | 87% |  |  |  | 76% | 77% | 84% |
| Year 2 Spring  | n | 5 | 36 | 501 | 16 | 89 | 720 | 22 | 64 | 923 |  |  |  | 43 | 189 | 2144 |
| %  | 56% | 82% | 76% | 76% | 72% | 80% | 76% | 74% | 84% |  |  |  | 73% | 75% | 81% |
| Year 3 Fall  | n | 6 | 35 | 441 | 17 | 84 | 668 |  |  |  |  |  |  | 23 | 119 | 1109 |
| %  | 67% | 80% | 67% | 81% | 68% | 74% |  |  |  |  |  |  | 77% | 71% | 71% |
| Year 3 Spring  | n | 6 | 33 | 425 | 16 | 83 | 648 |  |  |  |  |  |  | 22 | 116 | 1073 |
| %  | 67% | 75% | 64% | 76% | 67% | 72% |  |  |  |  |  |  | 73% | 69% | 69% |
| Year 4 Fall  | n | 5 | 35 | 409 |  |  |  |  |  |  |  |  |  | 5 | 35 | 409 |
| %  | 56% | 80% | 62% |  |  |  |  |  |  |  |  |  | 56% | 80% | 62% |
| Year 4 Spring  | n | 5 | 32 | 390 |  |  |  |  |  |  |  |  |  | 5 | 32 | 390 |
| %  | 56% | 73% | 59% |  |  |  |  |  |  |  |  |  | 56% | 73% | 59% |

# Appendix E. Student Achievement in Required Courses by Cohort

|  |  |  |  |
| --- | --- | --- | --- |
|  | Summer Bridge | Comparison Group | All Other UCM |
| 2007 Cohort |
| Writing 001 GPA | 2.8 | 2.7 | 2.8 |
| %Passed | 100% | 94% | 95% |
| Writing 010 GPA | 2.3 | 2.9 | 3.0 |
| %Passed | 88% | 97% | 97% |
| Core 001 GPA | 2.2 | 2.8 | 2.8 |
| %Passed | 75% | 97% | 96% |
| 2008 Cohort |  |  |  |
| Writing 001 GPA | 3.0 | 2.9 | 3.1 |
| %Passed | 100% | 89% | 96% |
| Writing 010 GPA | 2.3 | 2.9 | 3.1 |
| %Passed | 85% | 97% | 97% |
| Core 001 GPA | 2.3 | 2.7 | 2.9 |
| %Passed | 89% | 93% | 95% |
| 2009 Cohort |  |  |  |
| Writing 001 GPA | 3.1 | 2.7 | 3.0 |
| %Passed | 96% | 90% | 96% |
| Writing 010 GPA | 2.7 | 3.0 | 3.0 |
| %Passed | 89% | 98% | 97% |
| Core 001 GPA | 2.8 | 2.7 | 2.8 |
| %Passed | 92% | 96% | 96% |
| 2010 Cohort |  |  |  |
| Writing 001 GPA | 3.1 | 3.1 | 3.0 |
| %Passed | 97% | 100% | 98% |
| Writing 010 GPA | 2.5 | 2.8 | 3.0 |
| %Passed | 90% | 99% | 97% |
| Core 001 GPA | 2.6 | 2.7 | 2.8 |
| %Passed | 89% | 91% | 94% |