

#### Assistance, Counseling and Encouragement (ACE) Program:

Impact on GPA and Departure in Academic Year 2011-12 and 2012-13

Gary Coyne, PhD Interim Director of Evaluation and Assessment Office of Undergraduate Education

> Michaela Curran Doctoral Student in Sociology Office of Undergraduate Education

> > Spring, 2014

*Summary:* The GPA of ACE participants increases after participation and returns to levels comparable to similar non-participants. Compared to all students, former ACE participants leave the university at relatively high rates although this is largely driven by CNAS participants. Effective peer mentoring appears to be the most impactful portion of the ACE program. Students referred from the Financial Aid office for failing to make satisfactory academic progress constitute a large share of ACE participants but their departure rates are higher than for other participants, suggesting it may be profitable to revisit how students are referred to ACE and strengthen ties with academic departments and colleges.

#### Introduction

The Assistance, Counseling and Encouragement (ACE) program is designed to provide support to undergraduate students who are experiencing academic difficulty. For the largest share of ACE participants, the problem is failing to make satisfactory academic progress (SAP) per the terms of financial aid agreements; others are on academic probation. ACE also works with students referred by staff in the Academic Resources Center (ARC) and other offices on campus. After an intake meeting with professional staff to determine areas of concern, participants attend workshops to address identified areas of concern, like study skills or test-taking strategies. Support for these students, however, largely takes the form of peer-to-peer mentoring sessions. The specific expectations of participants are formalized in a Personalized Academic Contract (PACT) that specifies students' obligations in terms of meeting with their mentors, attending workshops and using other student support services. Whether or not a student successfully completed their PACT is communicated to their referral source (i.e.: Associate Dean, Academic Advisor or Financial Aid Office) and this information is considered as part of decisions regarding that student's continuing enrollment or receipt of finical aid.

This report addresses the overall impact of the ACE program in AY11-12 and AY12-13 on GPA and percent of participants who leave the university. The report also attempts to shed light on parts of the ACE program that may be particularly efficacious. To that end, each of the three following major sections addresses one of the following questions:

- 1. What is the population of students served by ACE?
- 2. What is the impact of participation in ACE on student grades and departure from the university?
- 3. Do all those who participate in ACE see the same kind of benefits and are all components of the ACE program equally impactful on GPA and retention?

The data used here comes from student data sets assembled by the Strategic Academic Research and Analysis office and records kept by the ACE program. The later includes surveys taken by students at the beginning and end of their participation in ACE that focused on issues like time management, study skills, test-taking anxiety and common other areas of self-assessed academic and personal difficulty.<sup>1</sup>

#### **1. Demographics of ACE users**

During AY11-12 the ACE program served 192 students and in AY12-13 325 students. Table 1 shows referral source of students, which quarter students participated and the percent that completed their PACT. In AY11-12, the largest source for referrals is the "Other" category; the "Other" category in AY12-13 is aggregated (for comparability to previous year's data) from several more precise categories-such as particular campus organizations that referred students- as well as a handful of student self-referrals.<sup>2</sup> About one-third of participants in AY11-12 were referred by the Financial Aid Office's Policy on Satisfactory Academic Progress (SAP), which mandates a 2.00 cumulative GPA to remain eligible for financial aid. In AY12-13 about two-thirds of participants were referred from SAP. The Financial Aid Office conducts its' audit of student records in the spring quarter and refers these students to ACE for the fall quarter. In both years, ACE works with more than half of all the students it serves in the fall quarter.

<sup>&</sup>lt;sup>1</sup> Attempts were made to conduct focus groups to delve deeper into what students saw as useful about the ACE program, how the program impacted their confidence and how long they thought these benefits lasted. However, an insufficient number of students responded to invitations so these focus groups were not held.

<sup>&</sup>lt;sup>2</sup> The "Other" category for AY12-13 include BCoE, CNAS and CHASS Deans' Offices, Chicano Student Programs, Athletics, and Student Special Services with each referring one or two students.

While the number of ACE participants on academic probation is not insignificant (24 in AY11-12 and 87 in AY12-13), this group only makes up 10-25% of all participants.

Table 2A and 2B show demographic characteristics of all ACE participants for AY11-12 and AY12-13, respectively. For both tables all ACE participants are shown at the far left, shaded in darkest blue, and the subgroups that did and did not complete their PACT are shaded in lighter blues. At the right, shaded in darkest yellow, are all UCR students and then the subgroups of (all) non-ACE students that remained on good standing all three quarters and those that were placed an academic probation one or more quarters are shaded in lighter yellows.

In terms of academic characteristics, ACE participants do not compare favorably to those UCR students who were in good academic standing all three quarters, and these differences are especially pronounced for AY11-12 participants. Compared to those students on probation but not participating in ACE, all ACE participants have similar GPAs but lower standardized test scores (again, with AY11-12 participants comparing less favorably). It is worth noting that in AY11-12, 96% of ACE participants completed their PACT, while in AY12-13 only 80% of participants did so.

There are a number of things to note in the demographic comparisons in the lower portion of Tables 2A and 2B. First, in terms of gender, there are more females in ACE. In AY11-12, 71% of participants are female and, while for AY12-13, the difference among all participants is not as large, almost two thirds of those that complete their PACT in both years are female. Second, students who identify as Hispanic participate in ACE, and complete contracts, at rates higher than the demographics of all students on probation might suggest; students in all other groups participate less (with the exception of students who identify as African American in AY11-12). Third, there is a pronounced drop-off in ACE participation as students progress through their academic career from freshman to senior. While it is debatable how much a student might gain from ACE in their final quarters at UCR, there are a considerable number of juniors and seniors among all students on academic probation (shown at the far right of Tables 2A and 2B)<sup>3</sup>. Fourth, low income and first generation students make up a relatively large share of ACE participants (particularly in AY11-12) and most these students successfully complete their contracts.

#### 2. Impacts of ACE Participation on GPA and Student Departure

Tables 3A-6B present GPA and student departure data for both cohorts of ACE participants, with participants split by referral source and PACT status as well as by college. Data on relevant comparison groups are also presented. In Tables 3 and 4 students are identified based on the quarter in which they participated in ACE and then followed out for as many quarters as data is available. While most students participate in ACE in the fall, participants are aggregated across all quarters so that Q1 is the winter for many, but not all, participants. For all participants, Q1 is the quarter after ACE, Q2 the one after that and so on. (Q0 is the quarter before ACE participation.)

Starting with GPA comparisons in Tables 3A (AY11-12) and 3B (AY12-13), the top row(s) show that all ACE participants start with a GPA of 2.00 to 2.10 and then see about 0.10 point increase in cumulative GPA for two to three quarters after ACE, "leveling out" around 2.45. To guard against the possibility that this change is caused by students leaving university records the next row uses only cases for which data is available for all quarters. (If those students with the lowest GPAs leave, the average GPA of those remaining will, mathematically, increase.) We see a similar, if less pronounced,

<sup>&</sup>lt;sup>3</sup> Somewhat tangential to the analysis of ACE, it may be worth investigating how being on academic probation so late in a student's academic career impacts overall time-to-degree.

improvement in GPA for the constant cases in both cohorts. For the AY11-12 cohort, the very few students who did not complete their PACT had lower GPAs; those from SAP and all other sources had similar GPAs. For AY12-13 the differences between complete and incomplete PACT and referral sources are minimal.

Tables 3A and 3B also present GPA data on one group of students matched on class level, college, probationary status and SAT Math and Verbal scores;<sup>4</sup> the second comparison group is all UCR students on academic probation one or more quarters. Both of these groups have GPAs between 2.30 and 2.50 in all quarters. This means, then, that they start off with higher GPAs than ACE participants but a few quarters later the ACE participant average GPAs have returned to something similar to these groups. ACE participants' GPAs return to a level common among similar students , although it bears pointing out that even this group is 0.20 to 0.30 grade points below the all UCR average.

Because the number of ACE participants is not particularly large by statistical standards, and the potentially overwhelming number of comparisons that could be made, t-tests for differences in GPA between various groups in Table 3A and 3B will only be reported here for only a few key comparisons. (In all cases significance is determined at p < 0.05 with a two tailed test.) Differences between the GPA of ACE participants during the quarter in which they participated in ACE and all students in the same quarter are significant in both cohorts; the differences between the ACE group and all students are also significant in the last quarter for which we have data (Q5 for the AY11-12 cohort and Q3 for the AY12-13 cohort). The differences between ACE participants and the comparison groups in both cohorts are also significant for the quarter in which students participated in ACE but, importantly, are not significant in the final quarters for which data is available. This group of comparisons suggests that real differences in GPA between ACE participants and all students persist but that after participation ACE students return to a level of academic performance that is very similar to a comparable group of students. It is also noteworthy that there are significant improvements between initial and final GPA for both ACE cohorts (again, Q5 for the AY11-12 ACE cohort and Q4 for the AY12-13 ACE cohort).

Tables 4A and 4B present GPAs by college. There are few ACE participants from BCoE or SoBA so information relevant to these groups is presented in footnotes on pages 14 and 15. In both cohorts the CHASS participants start off with GPAs that are marginally higher than the CNAS participants, but after several quarters this is reversed. The tables also present the same comparison groups, one group matched on class level, college, probationary status and SAT Math and Verbal scores and a second consisting of all students in the same college on probation one or more quarters. In both colleges, the comparison group starts off higher and for CHASS students remain somewhat higher although the CNAS comparison group shows little difference. The general patterns by college, however, are not markedly different from each other or from the patterns for all respondents: ACE participants return to a GPA comparable to that of comparison groups but remain below the averages for their colleges.

Tables 5A (AY11-12) and 5B (AY12-13) present departure rates for ACE participants. Students who graduate are not counted among leavers but it is not possible to distinguish between permanent departure from the university and what may, ultimately, prove to be a temporary gap in enrollment ending after the fall of 2013. However, discontinuous enrollment patterns are themselves a source of concern as they are associated with longer time-to-degree and fewer such students ultimately earn degrees (Goldric-

<sup>&</sup>lt;sup>4</sup> That is, for each ACE participant another student was selected at random who was at the same class level (freshman, sophomore, junior, senior), in the same college, on the same probationary status (on probation or not), and similar SAT Math and Verbal scores (within +/- 20 points).

Rab, 2006; King, 2003).<sup>5</sup> Thus, counting these students among those who experienced negative outcomes is not entirely an artifact of the way missing data is accounted for. In all cases, the ACE groups leave the university at relatively high rates, with 17% of the AY11-12 cohort and 22% of the AY12-13 cohort leaving. Those who do not complete their PACTs leave at considerably higher rates, although it is wise to remember that very few students did not complete their PACT in the 2011-12 cohort. About 25% of students referred from SAP leave the university in the year following ACE and, for the earlier cohort, more than 33% have left by the end of the second year. In both cases, however, the decreased departure rates for those who complete their PACT or are referred from sources other than SAP may be a selection effect whereby students who take their academic performance more seriously are more likely to stay at the university as well as more likely to engage with the ACE program.

Tables 5A and 5B also present data for comparison groups. One comparison group matched on class level, college, probationary status and SAT Math and Verbal scores and the other comparison group is students on academic probation any quarter during the respective academic year. These groups leave the university at lower rates than the ACE participants, 5-10% lower at one year and two years for the AY11-12 cohort, although the one year departure rate is similar for the AY12-13 cohort. Tables 5A and 5B include the rate at which incoming freshmen leave the university in their first and second year, although because of differences in the composition of the groups these figures are more a point of reference and less a direct comparison.

Tables 6A and 6B break down departure rates by college (again, with BCoE and SoBA in footnotes because of low numbers of participants). Most importantly, departure rate for CNAS students who participate in ACE is about double the rate for CHASS participants. For AY11-12 the CHASS departure rates for ACE participants are only a percent or two higher than for the comparison group, but for AY12-13 the rates are about 5-6% percentage points higher. For CNAS, in AY11-12 10% more ACE students leave than for the comparison group and in AY12-13 20% more ACE participants leave than students in the comparison group. The overall departure rates for both colleges are low- 5-10% at one year- and similar, although somewhat higher, for CHASS participants.

To summarize the multiple tables reviewed in this section, ACE participants start with lower GPA's and then see an improvement in their GPA (roughly moving from just over 2.00 to 2.45) within a few quarters and attaining average cumulative GPAs that are similar to comparable groups of students. ACE participants do leave the university at higher rates than comparable groups, although this is driven largely by students from CNAS.

#### **3. Experiences within the ACE Program**

Having established some benefits of ACE participation on GPA, it is useful to try to isolate particular elements of the program that may be particularly efficacious or particular groups of students that appear to see larger benefits. To do this, participants are examined in terms of general background characteristics, relatively specific issues like study skill problems identified in the ACE intake process, and then specific experiences in ACE program, such as number and kinds of workshops and which peer mentor they worked with.

<sup>&</sup>lt;sup>5</sup> Goldrick-Rab, Sara. 2006. "Following Their Every Move: An Investigation of Social-Class Differences in College Pathways." *Sociology of Education* 79(1), 61-79.

King, Jacqeline, E. 2003. "Nontraditional Attendance and Persistence: The Cost of Student Choices." *New Directions for Higher Education* 121, 69-83.

Two similar statistical regression procedures were used to assess the impact of demographics, intake characteristics and a variety of experiences in the ACE program on GPA and departure. For impacts on GPA, an ordinary least squares (OLS) regression was used; to make the total number of variables manageable only GPA the first and third quarter following ACE participation are used. For retention, logistic regressions are used; retention is calculated annually and as many years of data as are available are used. Regression techniques, in general, allow one to examine how changes in the values of one, predictor, variable are related to changes in the values of a second, outcome, variable; for example, how higher (or lower) scores on an assessment of study skills relate to subsequent GPA. Logistic regression and OLS regressions are closely related except that logistic regression is suitable for use where the outcome variable is best captured as a binary, here either the student left UCR or did not. In both logistic and OLS regressions, a positive coefficient signifies that as the predictor variable increases we can expect the outcome variable to increase. However, care must be taken in comparing the size of coefficients where the predictor variables have different scales because, as an example, a change of 1.0 in an SAT score is not the same as a change of 1.0 in GPA.

We first estimate the impact of background characteristics on all outcomes to see if the ACE program is particularly efficacious for students who may be more or less prepared for college. Given that high school GPA and SAT scores have been found to have a relatively large impact on college performance (Geiser and Studley 2002)<sup>6</sup> these variables are retained in all subsequent regression models. Coefficients in bold face have a significantly significant impact on the outcome variables (significance is defined as p < 0.05, two-tail).

First, Tables 7A and Table 7B present demographic characteristics. There are no significant effects of high school GPA or SAT scores in the AY11-12 cohort, although for the AY12-13 cohort combined SAT scores has a very small, but significant, impact on GPA two quarters after ACE participation. There are no significant effects for students who are first generation or low income in either cohort. In both cohorts, there is at least one negative effect for the group referred from SAP, indicating that these students are less likely to do well in subsequent quarters than other ACE participants. Data (reported above) from the AY11-12 ACE cohort shows that SAP students have significantly lower GPAs and are significantly more likely to leave school than students referred from other sources. In the AY12-13 cohort, SAP students are significantly more likely to leave at some point during the academic year.

Second, as part of ARC's intake procedures students take a survey that includes self-assessments on ten<sup>7</sup> different issues that may cause or compound academic difficulties. These are five questions scales, developed by ACE staff, and taken online. This data is only available for the ACE AY12-13 cohort. Table 8 shows average scores on these scales, where lower scores indicate cause for concern. It is encouraging that for most of these scales averages increase by 5-15% after participating in ACE. However, for the attitude scale the average change is negative and for some others (i.e.: anxiety and concentration) the average change is small. The impact of changes in these areas on subsequent GPAs and departure is shown in Table 9. Here we control for high school GPA and SAT scores, but highlight (in light blue) the coefficients for the self-assessment scores. OLS regressions for the change scores on these items show no significant relationship to any of these outcomes. (Substantively similar results are obtained when just the pre- or post-test scores are used.) The small number of students mean results

<sup>&</sup>lt;sup>6</sup> Geiser, Saul and Roger Studley. 2002. "UC and the SAT: Predictive Validity and Differential Impact of the SAT I and SAT II at the University of California." *Educational Assessment* 8(1), 1-26.

<sup>&</sup>lt;sup>7</sup> There are measures for anxiety, attitude, concentration, information processing, motivation, self-testing, selecting main ideas, study aids, time management and test taking strategies.

should be taken as suggestive, but the lack of significant association with outcomes may indicate the scales do not accurately measure what they claim to measure or that the changes are not large enough to impact outcomes in subsequent quarters.

Third, as part of the ACE program students complete a number of thematic workshops and interact with an assigned peer mentor or professional staff member. Table 10 shows student participation by workshop. In both years, the time management and writing college papers workshops saw the most attendees. While the percent of students participating in a given workshop varies considerably from year to year the total number of students that participated in a given workshop is similar in both years. This, then, drives the lower number of workshops per student (1.83) for the AY12-13 cohort as compared to (2.93) the AY11-12 cohort.

Table 11A and Table 11B provide results for OLS regressions for the workshop data. Again high school GPA and SAT scores are controlled for but coefficients of interests are highlighted (in light blue). The total number of workshops has a significant relationship to subsequent quarter's GPA for both cohorts; however for the 2012-13 cohort, the effect size is small and negative. This suggests that attending an additional workshop changes the subsequent quarter's GPA by just 0.05 or -0.03. The negative correlation to subsequent GPA may be a selection effect in which the students in need of most help both had the lowest GPAs and attended the most workshops. (It is not clear why this would happen in one cohort and not the other, however in neither case is the sample size particularly large by statistical standards.) None of the individual workshops show a positive impact on GPA, with the exception of writing college papers (which has a positive impact on retention for the AY11-12 cohort) and test-taking strategies (which has a negative effect on subsequent quarter GPA for the AY12-13 cohort). The relationship between the week the contract began, GPA, and departure is also tested for the AY2012-13 cohort. Data for the AY11-12 cohort is unavailable.) Positive coefficients (in Table 11B) indicate that earlier contracts may confer GPA advantages, however the coefficient is insignificant. The variable also lacks a significant effect on departure. This, and the finding with regard to total number of workshops, suggests that more involvement with ACE program has no clear link to positive outcomes.

Finally, the most substantial component of the ACE program is student interaction with peer mentors. As shown in Table 12, there were 15 peer mentors in AY11-12 working with an average 11 students each and 17 peer mentors in AY12-13 working with an average of 15 students each. The professional staff that direct the ACE program also meet with individual students and in the most recent year they have worked with a significant number of students, 86 in total. To assess potential differences between peer mentors a dummy variable is created for each student and coded 1 if that student worked with that peer mentor and 0 otherwise. When these variables are regressed on later GPA and retention, we see in Tables 13A and 13B that a number of peer mentors in each cohort appear to have had a significant positive impact on grades. The relatively small number of students working with each peer mentor makes the statistical impact of peer mentors particularly sensitive to the outcomes of one or two students, but this finding is encouraging.

In attempting to make sense of the large number of regression coefficients, it is important to bear in mind that the convention of marking significance at p < 0.05 means that even with random data one would expect about five results in one-hundred to attain significance. Thus, in groups of variables that are largely insignificant in their impact on GPA or departure, one or two significant results may not be of much substantive or practical importance. What is noteworthy, then, is that there are a number of significant positive associations between the dummy variables for peer mentors, suggesting that effective peer mentoring may be the single most important component of the ACE program.

#### Conclusions

With the exception of a few self-referred students, those who participate in ACE are experiencing such difficulties that the financial aid office, a member of the ARC staff or someone else has seen fit to intervene and average GPAs prior to participation were not much above 2.00. When viewed in this light, then, the ACE program can be seen as successful in affecting some improvement in GPA among these students. The success, however, should be seen in the context of returning these students to an average GPA of comparison groups that may also be struggling academically. It would be difficult to completely rule out the possibility that, after experiencing a period of relatively severe academic difficulty, many students would return to average levels of performance (or be forced to leave the university) without any specific programmatic intervention. However, the constant case comparisons provide some assurance that this is not completely driving the observed improvements in GPA. Also, the fact that those who do not complete their PACT leave the university at rates higher than their comparison groups, although this is driven in large part by substantially higher departure rates from students in CNAS. It is encouraging that low income and first generation students do as well in the ACE program as other students.

Students referred from the Financial Aid Office's SAP clause make up a sizable share of ACE participants in both years, yet these students do not seem particularly well served by the ACE program, leaving the university at higher rates than other ACE participants. It may be useful, then, for ACE to consider working with students from sources other than SAP. There appears to be considerable room to expand referrals from departments and college deans' offices. With three full-time professional staff, there would seem to be room to expand participation, particularly in the winter and spring quarters. Although it is unclear why, fewer males participate in ACE this may be another area where there is room for expansion and outreach.

Once these students arrive at the ACE program, assessing student's strengths and weakness and making programmatic decisions based on these data is preferable to the alternative. However, given the lack of predictive validity of the survey inventories currently employed it may be worth exploring using externally developed measures or scaling back on the number of areas assessed to streamline the intake process. Similarly, ARC staff may wish to revisit the number and variety of workshops offered, as the findings here suggest making reductions here would be unlikely to dramatically impact the overall effectiveness of ACE. Having professional staff work with large numbers of students runs contrary to the peer advising model and may not be an effective use of programmatic resources. At the same time, there is evidence that effective peer mentoring maybe the most important part of the ACE program. The selection, training and supervision of peer mentors may be a productive place to focus time and effort.

# Table 1: ACE Cohort Comparison

	AY11-1	2 Cohort	AY12-13 Cohort			
Total Participants	1	92	32	25		
	%	N	%	N		
Referral Source						
ARC Staff	3.13%	6	14.46%	47		
<b>Colleges/Departments</b>			3.38%	11		
Other	58.33%	112	15.69%	51		
SAP	38.54%	74	65.85%	214		
Self			0.62%	2		
PACT Status						
Complete	96.88%	186	79.38%	258		
Incomplete	3.13%	6	20.62%	67		
Percentage Served						
Fall quarter	55.73%	107	67.69%	220		
Winter quarter	30.21%	58	21.54%	70		
Spring quarter	14.06%	27	10.77%	35		
Academic Standing						
<b>On Probation</b>	87.50%	168	73.23%	238		
Not on Probation	12.50%	24	26.77%	87		

	ACE Participants						UCR Students not Participating in ACE					
	Over	all	Comj Cont	plete ract	No Con Contr	nplete :act	Over	all	In Good S all Three Q	tanding Juarters	On Probation one or more Quarters	
Academic Chars	Mean (SD)	N	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν
High School GPA	3.43 (0.33)	175	3.42 (0.33)	169	3.58 (0.27)	6	3.48 (0.35)	15,830	3.52 (0.36)	10,895	3.41 (0.33)	4,935
SAT Verbal	457.25 (68.32)	171	456.85 (67.17)	165	468.33 (102.84)	6	512.33 (83.65)	15,866	519.13 (83.29)	10,936	497.24 (82.47)	4,930
SAT Math	479.06 (85.63)	171	478.79 (81.87)	165	486.67 (171.43)	6	547.87 (95.32)	15,866	554.00 (94.55)	10,936	534.27 (95.62)	4,930
SAT Writing	463.70 (75.35)	165	463.77 (74.03)	159	461.67 (114.27)	6	516.54 (81.49)	15,594	523.40 (81.21)	10,758	501.28 (80.04)	4,836
UCR Cum. GPA Spring 2012	2.26 (0.30)	163	2.27 (0.29)	160	1.64 (0.22)	3	2.86 (0.51)	16,795	3.06 (0.41)	11,836	2.36 (0.35)	4,959
Female	71.20%	136	71.35%	132	66.67%	4	51.78%	9,664	52.98%	6,857	49.06%	2,807
Male	28.80%	55	28.65%	53	33.33%	2	48.22%	8,999	47.02%	6,085	50.94%	2,914
Hispanic	60.42%	116	60.22%	112	66.67%	4	32.57%	6,096	30.42%	3,949	37.42%	2,147
Asian	19.79%	38	20.43%	38	0.00%	0	40.27%	7,537	40.52%	5,260	39.69%	2,277
Caucasian	5.21%	10	5.38%	10	0.00%	0	15.56%	2,912	17.49%	2,271	11.17%	641
African American	10.42%	20	9.68%	18	33.33%	2	7.52%	1,408	7.20%	934	8.26%	474
Other <sup>8</sup>	4.17%	8	4.30%	8	0.00%	0	4.09%	765	4.37%	567	3.45%	198
Freshman	49.44%	88	49.43%	86	50.00%	2	25.52%	4,688	23.09%	2,939	31.00%	1,749
Sophomore	25.84%	46	25.29%	44	50.00%	2	21.88%	4,020	20.73%	2,639	24.48%	1,381
Junior	20.22%	36	20.69%	36	0.00%	0	26.98%	4,957	27.20%	3,463	26.48%	1,494
Senior	4.49%	8	4.60%	8	0.00%	0	25.18%	4,627	28.36%	3,610	18.03%	1,017
BCoE	6.25%	12	5.38%	10	33.33%	2	10.67%	1,998	9.60%	1,246	13.11%	752
CNAS	19.27%	37	19.89%	37	0.00%	0	22.34%	4,181	22.66%	2,941	21.61%	1,240
CHASS	72.92%	140	73.12%	136	66.67%	4	58.02%	10,860	56.59%	7,346	61.25%	3,514
SoBA	1.56%	3	1.61%	3	0.00%	0	8.97%	1,679	11.15%	1,448	4.03%	231
<b>First Generation</b>	79.21%	141	79.31%	138	75.00%	3	53.55%	9,839	51.57%	6,566	58.01%	3,273
Not First Generation	20.79%	37	20.69%	36	25.00%	1	46.45%	8,534	48.43%	6,165	41.99%	2,369
Low Income	80.34%	143	79.89%	139	100.00%	4	49.66%	9,124	46.88%	5,968	55.94%	3,156
Not Low Income	19.66%	35	20.11%	35	0.00%	0	50.34%	9,248	53.12%	6,762	44.06%	2,486

### Table 2A: ACE Students vs. Non-ACE Students AY11-12

<sup>&</sup>lt;sup>8</sup> "Other" category includes Native American students. This category was combined to preserve anonymity because there were so few Native American students.

	ACE Participants						UCR Students not Participating in ACE					
	Ove	rall	Com Cont	plete ract	No Cor Cont	nplete ract	Ove	rall	In Good all Three	Standing Quarters	On Probation one or more Quarters	
Academic Chars	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν	Mean (SD)	Ν
High School GPA	3.44 (0.33)	290	3.45 (0.32)	233	3.43 (0.37)	57	3.52 (0.35)	15,961	3.55 (0.35)	11,364	3.45 (0.32)	4,597
SAT Verbal	479.19 (78.68)	295	475.40 (77.71)	237	494.66 (81.40)	58	516.38 (83.17)	15,936	521.06 (82.36)	11,357	504.76 (84.02)	4,579
SAT Math	513.32 (91.82)	295	508.78 (90.55)	237	531.90 (95.41)	58	553.20 (94.76)	15,936	556.30 (94.62)	11,357	545.51 (94.70)	4,579
SAT Writing	484.30 (73.91)	277	479.36 (72.63)	220	503.33 (76.33)	57	522.18 (81.37)	15,808	527.21 (80.85)	11,271	509.68 (81.32)	4,537
UCR Cum. GPA Spring 2013	2.33 (0.36)	269	2.34 (0.35)	222	2.31 (0.39)	47	2.87 (0.51)	16,919	3.07 (0.41)	12,227	2.35 (0.36)	4,692
Female	58.82	190	62.40	161	44.62	29	51.56	9,654	52.89	7,064	48.25	2,590
Male	41.18	133	37.60	97	55.38	36	48.44	9,071	47.11	6,293	51.75	2,778
Hispanic	49.23	159	51.94	134	38.46	25	33.95	6,371	32.23	4,314	38.24	2,057
Asian	34.06	110	33.72	87	35.38	23	40.48	7,596	40.90	5,475	39.43	2,121
Caucasian	7.74	25	6.59	17	12.31	8	15.18	2,849	16.69	2,234	11.43	615
African American	7.12	23	6.20	16	10.77	7	7.23	1,356	6.79	909	8.31	447
Other <sup>9</sup>	1.86	6	1.55	4	3.08	2	3.16	593	3.39	454	2.58	139
Freshman	35.20	107	36.82	88	29.23	19	25.48	4,689	23.28	3,050	30.92	1,639
Sophomore	29.28	89	28.45	68	32.31	21	20.60	3,792	19.49	2,554	23.35	1,238
Junior	25.99	79	25.94	62	26.15	17	25.91	4,769	26.22	3,436	25.15	1,333
Senior	9.54	29	8.79	21	12.31	8	27.86	5,127	30.80	4,036	20.58	1,091
BCoE	9.29	30	11.24	29	7.69	5	11.71	2,198	10.77	1,442	14.05	756
CNAS	13.93	45	14.34	37	15.38	10	23.44	4,398	23.47	3,142	23.35	1,256
CHASS	75.85	245	74.03	191	76.92	50	57.53	10,795	56.66	7,585	59.68	3,210
SoBA	0.93	3	0.39	1			7.32	1,374	9.09	1,217	2.92	157
<b>First Generation</b>	70.72	215	72.38	173	64.62	42	54.74	10,075	52.99	6,943	59.08	3,132
<b>Not First Generation</b>	29.28	89	27.62	66	35.38	23	45.26	8,329	47.01	6,160	40.92	2,169
Low Income	54.61	166	56.49	135	47.69	31	39.78	7,322	37.85	4,960	44.56	2,362
Not Low Income	45.39	138	43.51	104	52.31	34	60.22	11,082	62.15	8,143	55.44	2,939

## Table 2B: ACE Students vs. Non-ACE Students AY12-13

ACE Program Impact GPA and Departure, AY11-12 & AY12-13 | 11

<sup>&</sup>lt;sup>9</sup> "Other" category includes Native American students. This category was combined to preserve anonymity because there were so few Native American students.

		Ç	20	A	CE	Q	<u>)</u> 1	Q	2	Q	3	Ç	24	Q	25
	Group	GPA (SD)	N	GPA (SD)	Ν	GPA (SD)	Ν	GPA (SD)	Ν	GPA (SD)	Ν	GPA (SD)	Ν	GPA (SD)	Ν
	All ACE Participants	2.07 (0.37)	128	2.04 (0.43)	178	2.16 (0.36)	171	2.26 (0.30)	163	2.34 (0.31)	142	2.41 (0.29)	130	2.44 (0.29)	124
ts	Constant ACE Participants	2.12 (0.38)	82	2.13 (0.42)	111	2.24 (0.29)	111	2.33 (0.26)	111	2.39 (0.26)	111	2.44 (0.28)	111	2.45 (0.29)	111
<b>E</b> Dan	Complete PACT	2.08 (0.37)	124	2.06 (0.42)	174	2.17 (0.35)	168	2.27 (0.29)	160	2.35 (0.30)	141	2.41 (0.29)	130	2.44 (0.29)	124
AC artici	Non Complete PACT	1.85 (0.10)	4	1.57 (0.28)	4	1.84 (0.30)	3	1.64 (0.22)	3	1.48 ()	1				
Å	SAP	1.91 (0.21)	57	2.03 (0.25)	62	2.16 (0.26)	60	2.21 (0.25)	56	2.27 (0.27)	50	2.35 (0.26)	42	2.38 (0.28)	44
	All Other Sources	2.20 (0.41)	71	2.05 (0.50)	116	2.16 (0.40)	111	2.28 (0.32)	107	2.38 (0.32)	92	2.44 (0.30)	88	2.47 (0.29)	80
arison ups	Matched Group	2.43 (0.42)	127	2.33 (0.54)	187	2.33 (0.46)	175	2.40 (0.39)	166	2.45 (0.32)	146	2.48 (0.31)	141	2.50 (0.31)	134
Compa Gro	Probation Students	2.43 (0.36)	3,969	2.34 (0.48)	5,586	2.33 (0.42)	5,305	2.36 (0.35)	4,959	2.42 (0.31)	4,061	2.46 (0.31)	3,736	2.49 (0.31)	3,529
UCR	All UCR	2.82 (0.49)	12,894	2.83 (0.56)	18,296	2.84 (0.54)	17,567	2.86 (0.51)	16,795	2.86 (0.48)	13,028	2.88 (0.47)	12,309	2.90 (0.46)	11,746

# Table 3A: Cumulative GPA AY11-12 Cohort (standard deviations in parenthesis)

		Q	0	A	CE	Q	21	Q	2	Q	3
	Group	GPA (SD)	N								
	All ACE Participants	2.11 (0.38)	203	2.13 (0.43)	303	2.27 (0.37)	270	2.33 (0.36)	269	2.47 (0.36)	222
ts	Constant ACE Participants	2.16 (0.38)	124	2.20 (0.43)	195	2.32 (0.34)	195	2.40 (0.34)	195	2.48 (0.36)	195
<b>E</b> ipan	Complete PACT	2.11 (0.39)	162	2.14 (0.43)	239	2.28 (0.36)	220	2.34 (0.35)	222	2.47 (0.35)	181
AC artici	Non Complete PACT	2.14 (0.34)	41	2.12 (0.44)	64	2.22 (0.38)	50	2.31 (0.39)	47	2.43 (0.37)	41
Å	SAP	2.10 (0.38)	158	2.19 (0.36)	198	2.32 (0.33)	171	2.36 (0.34)	174	2.48 (0.36)	142
	All Other Sources	2.17 (0.37)	45	2.02 (0.52)	105	2.18 (0.41)	99	2.29 (0.39)	95	2.43 (0.36)	80
ariso oups	Matched Group	2.58 (0.45)	212	2.47 (0.58)	315	2.44 (0.57)	302	2.51 (0.49)	279	2.59 (0.43)	241
Com n Gr	Probation Students	2.46 (0.36)	3,602	2.36 (0.50)	5,248	2.33 (0.44)	4,996	2.35 (0.36)	4,689	2.43 (0.31)	3,764
UCR	All UCR Mean GPA	2.85 (0.48)	12,734	2.86 (0.56)	18,215	2.85 (0.54)	17,506	2.87 (0.51)	16,830	2.87 (0.57)	18,444

# Table 3B: Cumulative GPA AY12-13 Cohort (standard deviations in parenthesis)

		Q	0	A	CE	Q	<u>1</u>	Q	2	Q	3	Q	24	Q	95
	Group <sup>10</sup>	GPA (SD)	N	GPA (SD)	N	GPA (SD)	N	GPA (SD)	Ν	GPA (SD)	N	GPA (SD)	N	GPA (SD)	N
	CHASS ACE Participants	2.05 (0.33)	87	2.05 (0.42)	127	2.17 (0.29)	127	2.24 (0.28)	127	2.33 (0.27)	111	2.40 (0.28)	103	2.43 (0.29)	99
ASS	CHASS Matched Group	2.45 (0.43)	91	2.35 (0.53)	139	2.35 (0.47)	130	2.41 (0.39)	123	2.47 (0.33)	110	2.50 (0.32)	108	2.54 (0.31)	101
CH	CHASS Probation Students	2.37 (0.34)	2,371	2.28 (0.47)	3,402	2.28 (0.41)	3,251	2.32 (0.33)	3,026	2.38 (0.30)	2,466	2.43 (0.30)	2,279	2.46 (0.30)	2,142
	All CHASS	2.75 (0.50)	7,263	2.77 (0.58)	10,562	2.78 (0.55)	10,090	2.81 (0.52)	9,644	2.82 (0.58)	10,487	2.82 (0.55)	10,061	2.84 (0.52)	9,627
	CNAS ACE Participants	2.15 (0.39)	29	2.03 (0.45)	37	2.12 (0.53)	33	2.37 (0.26)	26	2.40 (0.40)	23	2.47 (0.30)	21	2.48 (0.29)	20
AS	CNAS Matched Group	2.46 (0.36)	27	2.29 (0.53)	35	2.30 (0.44)	33	2.33 (0.45)	34	2.39 (0.28)	29	2.42 (0.24)	26	2.42 (0.29)	25
CN	CNAS Probation Students	2.53 (0.36)	896	2.41 (0.47)	1,210	2.40 (0.43)	1,135	2.42 (0.39)	1,075	2.46 (0.32)	898	2.51 (0.30)	818	2.53 (0.30)	793
	All CNAS	2.89 (0.47)	2,856	2.90 (0.55)	4,095	2.90 (0.52)	3,966	2.91 (0.50)	3,810	2.89 (0.56)	4,598	2.88 (0.53)	4,431	2.89 (0.51)	4,337

## Table 4A:Cummulative GPA AY11-12 Cohort, by College

 $<sup>^{10}</sup>$  Due to small numbers, BCoE (N=12) and SoBA (N=3) are not listed here. For BCoE, the Q1 GPA and Q6 GPA averages are 2.00 and 2.28, respectively. For SoBA, the Q1 GPA and Q6 GPA averages are 2.15 and 2.76, respectively.

	Q0		0	ACE		Q	<u>]</u> 1	Q2		Q3	
	Group <sup>11</sup>	GPA (SD)	N	GPA (SD)	N	GPA (SD)	Ν	GPA (SD)	N	GPA (SD)	N
	CHASS ACE Participants	2.12 (0.36)	153	2.12 (0.43)	229	2.26 (0.36)	209	2.32 (0.32)	212	2.45 (0.31)	180
ASS	CHASS Matched Group	2.57 (0.47)	167	2.49 (0.58)	241	2.46 (0.57)	230	2.53 (0.50)	214	2.61 (0.45)	184
СН	CHASS Probation Students	2.39 (0.35)	2,210	2.31 (0.50)	3,235	2.28 (0.44)	3,097	2.32 (0.35)	2,895	2.40 (0.31)	2,317
	All CHASS	2.77 (0.50)	7,113	2.80 (0.58)	10,416	2.79 (0.55)	9,991	2.82 (0.52)	9,554	2.82 (0.58)	10,394
	CNAS ACE Participants	2.01 (0.37)	30	2.07 (0.41)	43	2.26 (0.29)	32	2.36 (0.36)	31	2.46 (0.37)	23
<b>AS</b>	CNAS Matched Group	2.65 (0.30)	27	2.42 (0.59)	45	2.35 (0.58)	44	2.47 (0.37)	38	2.51 (0.30)	35
CN	CNAS Probation Students	2.58 (0.34)	772	2.43 (0.48)	1,128	2.40 (0.43)	1,066	2.40 (0.37)	1,020	2.45 (0.31)	835
	All CNAS	2.95 (0.46)	2,828	2.92 (0.54)	4,136	2.92 (0.52)	3,984	2.92 (0.50)	3,896	2.90 (0.58)	4,645

### Table 4B: Cumulative GPA AY12-13 Cohort, by College

<sup>&</sup>lt;sup>11</sup> Due to small numbers, BCoE (N=30) and SoBA (N=3) are not listed here. For BCoE, the Q1 GPA and Q4 GPA averages are 2.25 and 2.51, respectively. For SoBA, the Q1 GPA and Q4 GPA averages are 2.75 and 3.14, respectively.

## Table 5A: Departure, AY11-12 Cohort

		A	Y11	AY12		
	Group	%	Ν	%	Ν	
	All ACE Participants	16.67%	192	29.17%	192	
ants	Complete PACT	15.05%	186	26.88%	186	
ACE articipa	Non Complete PACT	66.67%	6	100.00%	6	
	SAP	29.73%	74	35.14%	74	
	All Other Sources	8.47%	118	25.42%	118	
Comparison	Matched Group, Non-ACE	11.64%	189	19.05%	189	
Comparison Groups	Probation Students, AY 11	12.03%	5,737	25.87%	5,737	
	All UCR One and Two Year Retention Rates <sup>12</sup>	0.12%	3,232	0.20%	2,943	

<sup>&</sup>lt;sup>12</sup> Note, the all UCR one and two year retention rates are calculated based only on entering freshmen. This data is provided by the Office of Strategic Academic Research and Analysis.

		AY12				
	Group	%	Ν			
	All ACE Participants	22.15%	325			
ants	Complete PACT	18.60%	258			
ACE	Non Complete PACT	35.82%	67			
Part	SAP	25.23%	214			
H	All Other Sources	16.22%	111			
Comparison	Matched Group, Non-ACE	21.81%	321			
Groups	Probation Students, AY 11	11.77%	5,376			
	All UCR One Retention Rates <sup>13</sup>	0.11%	3,588			

## Table 5B: Departure, AY11-12 Cohort

<sup>&</sup>lt;sup>13</sup> Note, the all UCR one year retention rate is calculated based only on entering freshmen. This data is provided by the Office of Strategic Academic Research and Analysis.

		AY	711	AY12		
	Group <sup>14</sup>	%	Ν	%	Ν	
$\mathbf{S}$	CHASS ACE Participants	12.86%	140	21.43%	140	
CHAS	CHASS Matched Group	10.71%	140	15.00%	140	
	CHASS Probation Students	12.24%	3,514	24.42%	3,514	
	All CHASS	9.34%	11,207	12.29%	14,227	
7.0	CNAS ACE Participants	24.32%	37	43.24%	37	
A	CNAS Matched Group	8.33%	36	25.00%	36	
CN	CNAS Probation Students	12.10%	1,240	27.50%	1,240	
•	All CNAS	6.79%	4,239	10.65%	5,710	

## Table 6A: Departure, AY11-12 Cohort by College

<sup>&</sup>lt;sup>14</sup> Due to small numbers, BCoE (N=12) and SoBA (N=3) are not listed here. For BCoE, the AY11 and AY12 departure rates are 33.33% and 75.00%, respectively. For SoBA, the AY11 and AY12 departure rates are 33.33% and 33.33%, respectively.

		A	¥12
	Group <sup>15</sup>	%	Ν
$\mathbf{S}$	CHASS ACE Participants	18.76%	245
<b>A</b> S	CHASS Matched Group	12.24%	245
∕H(	CHASS Probation Students	11.40%	3,317
0	All CHASS	7.11%	10,862
	CNAS ACE Participants	35.56%	45
AS	CNAS Matched Group	15.56%	45
	CNAS Probation Students	11.85%	1,156
<b>•</b>	All CNAS	5.54%	4,239

### Table 6B: Departure, AY12-13 Cohort by College

<sup>&</sup>lt;sup>15</sup> Due to small numbers, BCoE (N=30) and SoBA (N=3) are not listed here. For BCoE, the AY12 departure rate is 26.67%. For SoBA, the AY12 departure rate is 0.00%

	GPA Q1	GPA Q3	Depart. AY11	Depart. AY12
Ν	156	124	156	156
HS GPA	-0.183	-0.012	0.913	0.849
Combined SAT	0.000	0.000	-0.002	-0.001
First Gen	-0.004	0.035	1.064	0.708
Low Income	-0.089	0.050	-0.768	-0.201
SAP	-0.071	-0.156	1.468	0.757
Gender	-0.018	-0.007	-0.502	-0.485

 Table 7A: ACE Regression Models for Background Characteristics, AY11-12

Coefficients in bold are significantly different from zero at p < 0.05, two tailed test.

	GPA Q1	GPA Q3	Depart. AY12
Ν	268	156	270
HS GPA	0.010	0.107	0.952
Combined SAT	0.000	0.000	0.001
First Gen	-0.039	-0.039	0.142
Low Income	-0.047	-0.060	0.308
SAP	0.038	0.129	1.150
Gender	0.066	0.062	-0.086

### Table 7B: ACE Regression Models for Background Characteristics, AY12-13

Coefficients in bold are significantly different from zero at p < 0.05, two tailed test.

## Table 8: ACE Pre-Test and Post-Test Scores AY11-12 Cohort

	Pre-Test Pos		Post-	st-Test Diffe		rence
	Avg. % (S.D.)	N	Avg. % (S.D.)	Ν	Avg. % (S.D.)	Ν
Test Items						
Anxiety	60.32 (15.91)	314	60.18 (15.48)	173	2.36 (15.50)	173
Attitude	82.55 (9.98)	314	74.89 (11.91)	173	-8.00 (12.72)	173
Concentration	65.31 (14.68)	314	67.38 (14.26)	173	3.26 (13.50)	173
Information Processing	65.13 (12.64)	314	72.46 (13.58)	173	7.72 (12.50)	173
Motivation	72.05 (12.58)	314	77.04 (13.64)	173	5.39 (12.70)	173
Self-test	57.95 (14.30)	314	67.14 (15.67)	173	9.76 (15.67)	173
Selecting Main Ideas	68.64 (15.92)	314	74.06 (13.93)	173	7.10 (15.46)	173
Study Aids	59.15 (12.78)	314	76.12 (13.85)	173	16.23 (15.06)	173
Time Management	58.38 (15.90)	314	75.68 (13.65)	173	18.10 (14.54)	173
Test-taking Strategies	63.81 (13.69)	314	73.34 (12.47)	173	11.14 (13.54)	173
All Scales	65.33 (9.77)	314	71.83 (10.67)	173	7.31 (9.29)	173

	GPA Q1	GPA Q3	Depart. AY12
Model N	156	73	156
Anxiety Change	0.001	0.002	0.949
HS GPA	0.007	0.018	0.876
Combined SAT	0.000	0.000	0.003
Attitude Change	0.002	-0.001	1.029
HS GPA	0.003	0.010	0.863
Combined SAT	0.000	0.000	0.003
Concentration Change	0.002	-0.002	0.980
HS GPA	0.006	0.008	0.878
Combined SAT	0.000	0.000	0.003
Information Processing Change	0.001	-0.002	1.022
HS GPA	0.007	0.019	0.880
Combined SAT	0.000	0.000	0.003
Motivation Change	0.001	0.004	1.091
HS GPA	0.006	0.033	0.881
Combined SAT	0.000	0.000	0.003
Self-Testing Change	-0.001	-0.002	0.953
HS GPA	0.006	-0.003	0.869
Combined SAT	0.000	0.000	0.003
Selecting Main Ideas Change	-0.002	-0.001	0.966
HS GPA	0.019	0.016	0.874
Combined SAT	0.000	0.000	0.003
Study Aids Change	-0.002	-0.001	1.019
HS GPA	0.012	0.009	0.875
Combined SAT	0.000	0.000	0.003
Time Management Change	0.001	0.002	0.975
HS GPA	0.004	-0.001	0.884
Combined SAT	0.000	0.000	0.003
Test-Taking Strategies Change	-0.001	-0.002	1.062
HS GPA	0.008	0.009	0.873
Combined SAT	0.000	0.000	0.003

# Table 9: ACE Regression Models for Test Items, AY12-13

Coefficients in bold are significantly different from zero at p < 0.05, two tailed test.

	2011 Cohort		2012	Cohort
	%	Ν	%	Ν
Workshops				
Time Management	84.29%	161	55.38%	180
Critical Reading	33.33%	64	12.00%	39
Effective Note-taking	21.88%	42	15.38%	50
Marking Your Textbook	22.92%	44	3.69%	12
Writing College Papers	31.77%	61	20.92%	68
Test Taking Strategies	11.46%	22	16.92%	55
Exam Preparation	70.31%	135	41.85%	136
Goal Setting	16.15%	31	16.92%	55
Research Strategies	0.52%	1		0
	Avg. (S.D.)	Ν	Avg. (S.D.)	Ν
Workshop Total Average	2.93 (1.45)	191	1.83 (1.27)	325
Workshop Total Average (in person)	2.03 (1.48)	185	1.30 (1.17)	315
Workshop Total Average (PC)	0.89 (1.03)	184	0.51 (0.79)	309

# Table 10: ACE Cohort Comparison, Workshops

	GPA Q1	GPA Q3	Depart. AY11	Depart. AY12
Model N	~168	~130	~168	~168
Total Workshop Hours	0.041	0.015	-0.189	-0.162
HS GPA	-0.193	-0.024	0.447	1.015
Combined SAT	0.000	0.000	-0.001	-0.001
Time Management	0.038	0.005	-0.551	-0.178
HS GPA	-0.185	-0.021	0.363	0.919
Combined SAT	0.000	0.000	-0.001	-0.000
Exam Preparation	0.007	0.001	-0.644	-0.426
HS GPA	-0.176	-0.020	0.390	0.963
Combined SAT	0.000	0.000	-0.001	-0.001
Critical Reading	0.056	0.042	0.120	-0.472
HS GPA	-0.191	-0.029	0.313	1.068
Combined SAT	0.000	0.000	-0.000	-0.001
Effective Note-taking	-0.008	0.093	0.410	-0.099
HS GPA	-0.175	-0.031	0.284	0.948
Combined SAT	0.000	0.000	-0.001	-0.000
Marking Your Textbook	-0.028	0.107	0.704	0.210
HS GPA	-0.174	-0.028	0.309	0.923
Combined SAT	0.000	0.000	-0.000	-0.000
Writing College Papers	-0.012	-0.070	-0.163	0.404
HS GPA	-0.177	-0.022	0.338	0.967
Combined SAT	0.000	0.000	-0.001	-0.000
Test-Taking Strategies	0.112	0.065	0.551	-0.675
HS GPA	-0.184	-0.025	0.300	0.993
Combined SAT	0.000	0.000	-0.001	-0.000
Goal Setting	0.085	0.082	-1.185	-0.586
HS GPA	-0.173	-0.023	0.330	0.931
Combined SAT	0.000	0.000	-0.001	-0.001

## Table 11A: ACE Regression Models for Workshops, AY11-12

Coefficients in bold are significantly different from zero at p < 0.05, two tailed test.

	GPA Q1	GPA Q3	Depart. AY12
Model N	~276	~156	~276
Total Workshop Hours	-0.025	-0.018	0.068
HS GPA	-0.039	0.021	0.818
Combined SAT	0.000	0.000	0.002
Week Contract Started	0.015	0.001	0.161
HS GPA	-0.015	0.127	0.796
Combined SAT	0.000	0.000	0.001
Time Management	0.020	0.043	-0.414
HS GPA	0.014	0.106	0.736
Combined SAT	0.000	0.000	0.001
Exam Preparation	-0.043	-0.026	-0.277
HS GPA	0.014	0.113	0.731
Combined SAT	0.000	0.000	0.001
Critical Reading	0.060	-0.045	-1.025
HS GPA	0.017	0.107	0.694
Combined SAT	0.000	0.000	0.001
Effective Note-taking	-0.008	-0.068	-1.000
HS GPA	0.014	0.108	0.689
Combined SAT	0.000	0.000	0.001
Marking Your Textbook	0.105	0.185	-0.848
HS GPA	0.018	0.129	0.724
Combined SAT	0.000	0.000	0.001
Writing College Papers	-0.060	0.042	0.714
HS GPA	0.019	0.108	0.702
Combined SAT	0.000	0.000	0.001
Test-Taking Strategies	-0.117	-0.082	0.304
HS GPA	0.019	0.110	0.726
Combined SAT	0.000	0.000	0.001
Goal Setting	0.028	0.096	-0.283
HS GPA	0.016	0.121	0.722
Combined SAT	0.000	0.000	0.001

### Table 11B: ACE Regression Models for Workshops, AY12-13

Coefficients in bold are significantly different from zero at p < 0.05, two tailed test.

## Table 12: ACE Peer Mentors

2011 Cohort Peer (N = 17)	2011 Cohort Peer Counselors2012 Cohort Peer (N = 17)(N = 17)(N = 2)		
Counselor	Number of Students	Counselor	Number of Students
Peer Counselor 1	10	Peer Counselor 1	15
Peer Counselor 2	9	Peer Counselor 2	10
Peer Counselor 3	15	Peer Counselor 3	11
Peer Counselor 4	7	Peer Counselor 4	11
Peer Counselor 5	12	Peer Counselor 5	12
Peer Counselor 6	11	Peer Counselor 6	21
Peer Counselor 7	15	Peer Counselor 7	13
Peer Counselor 8	13	Peer Counselor 8	11
Peer Counselor 9	11	Peer Counselor 9	15
Peer Counselor 10	16	Peer Counselor 10	12
Peer Counselor 11	7	Peer Counselor 11	7
Peer Counselor 12	16	Peer Counselor 12	10
Peer Counselor 13	11	Peer Counselor 13	17
Peer Counselor 14	14	Peer Counselor 14	9
Peer Counselor 15	15	Peer Counselor 15	12
Professional Staff 1	3	Peer Counselor 16	9
Professional Staff 2	7	Peer Counselor 17	11
		Peer Counselor 18	12
		Professional Staff 1	60
		Professional Staff 2	26
Average	11.29	All	15.2
Peers only	12.13	Peers only	12.11
Staff Only	5.00	Staff Only	43.00

	GPA Q1	GPA Q3	Depart. AY11	Depart. AY12
Model N	168	130	143	159
Peer Counselor 1	0.370	0.486		-0.802
Peer Counselor 2	0.442	0.408	-2.380	
Peer Counselor 3	0.298	0.465	-2.011	-1.046
Peer Counselor 4	0.305	0.613	-1.598	-1.362
Peer Counselor 5	0.121	0.265	-1.757	-1.797
Peer Counselor 6	0.246	0.29	-2.546	-0.669
Peer Counselor 7	0.313	0.452	-1.507	-0.361
Peer Counselor 8	0.217	0.347	-1.824	-1.136
Peer Counselor 9	0.011	0.364	-1.746	-0.29
Peer Counselor 10	0.385	0.522	-1.635	-1.555
Peer Counselor 11	0.132	0.284		-1.956
Peer Counselor 12	0.375	0.594	-1.462	-0.866
Peer Counselor 13	0.508	0.545		-2.201
Peer Counselor 14	0.399	0.519	-1.337	-0.578
Peer Counselor 15	0.254	0.650	-1.132	-1.013
Professional Staff 1				-0.601
Professional Staff 2	0.085	0.582		

# Table 13A: ACE Regression Models for Peer Counselors, AY11-12

	GPA Q1	GPA Q3	Depart. AY12
Model N	284	156	263
Peer Counselor 1	0.286	0.324	-1.329
Peer Counselor 2	0.478	0.534	0.485
Peer Counselor 3	-0.080	0.461	0.389
Peer Counselor 4	0.137	0.475	-0.901
Peer Counselor 5	0.064	0.158	0.729
Peer Counselor 6	0.304	0.352	-0.835
Peer Counselor 7	0.254	0.491	1.190
Peer Counselor 8	0.201	0.634	0.617
Peer Counselor 9	0.148	0.412	-0.474
Peer Counselor 10	0.021	0.311	1.180
Peer Counselor 11	0.143	0.278	-0.503
Peer Counselor 12	0.127	-0.008	0.683
Peer Counselor 13	0.313	0.379	-0.009
Peer Counselor 14	0.206	0.379	-0.716
Peer Counselor 15	0.079	0.433	-1.025
Peer Counselor 16	0.130	0.303	-0.362
Peer Counselor 17	0.223	0.345	-1.024
Peer Counselor 18	0.346	0.343	0.159
Professional Staff 1	0.289	0.526	0.294
Professional Staff 2	0.476	0.592	

# Table 13B: ACE Regression Models for Peer Counselors, AY12-13