

# EARLY ASSIST

Impact of Participating in Early Assist on Course Performance Fall 2012 & Winter 2013



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Undergraduate Education Institutional Research Report

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## Executive Summary

### Fall 2012

- In fall 2012, 810 students in 9 courses were considered to be at-risk for failing their course (22.8%).
- 29.1% of at-risk students attended an Early Assist (EA) meeting with a Peer Educator in a group setting or individually.
- 23.4% of at-risk students who attended an EA meeting also used other services in the Academic Resource Center.
- The program had a positive effect on course grades in Economics 2 and Entomology 10.
- Students referred to Early Assist received an average of a D- or F on the early assessment exercise.
- Students who participated in Early Assist received an average final course grade in the C- range.
- Students received recruitment emails as early as week 1 and as late as week 6 with many falling between weeks 4 and 6. Most students attended group meetings in weeks 6 and 7.

### Winter 2013

- In winter 2013, 647 students in 8 courses were considered to be at-risk for failing their course (20.9%).
- 28.3% of at-risk students attended an Early Assist (EA) meeting with a Peer Educator in a group setting or individually.
- 29.0% of at-risk students who attended an EA meeting also used other services in the Academic Resource Center.
- The program had no effect on final course grades in winter 2013.
- Students referred to Early Assist received an average grade of an F on the early assessment exercise.
- Students who participated in Early Assist received an average final course grade in the D+ range.
- A majority of students received a recruitment email in week 4 or week 5 of the quarter and attended group meetings in week 5, 6, or 7.

## Introduction

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The University of California, Riverside (UCR) Academic Resource Center (ARC) launched a pilot Early Assist program in the spring of 2008 that served two academic courses. The program has grown and typically serves eight to ten courses each fall and winter quarter. The UCR Early Assist program works in partnership with faculty members teaching courses with historically high D and F grades and large numbers of freshman students. Participating faculty agree to administer an early assessment exercise within the first three weeks of the course. Students who fall below a specified benchmark (a minimum score on the early assessment exercise set by the participating faculty member) are recruited for participation in EA. The program was not shown to be successful in fall 2011 and winter 2012. As a result, small changes were made to the program in hopes to increase the success rate of students participating in EA. The revised version of the program is outlined below and results for fall 2012 and winter 2013 are presented.

## Faculty Members

The Academic Resource Center invites faculty members to participate in EA, but faculty may express interest in program participation as well. Participation is voluntary in every case. The faculty member is asked to administer an early assessment within the first three weeks of the course and to set a benchmark, a minimum score that students must achieve in order to demonstrate that they understand the material. The early assessment can take the form of a homework assignment, quiz, or exam, and the grade is recorded by faculty in iLearn (a web-based grade submission system). Students who score below the benchmark are identified as at risk of failing the course. This information is downloaded by ARC staff.

Students that fell below the benchmark were sent an e-mail by their professor through iLearn (a web-based system that provides online access to class materials) notifying them of their at-risk status. Faculty members are provided with an email template and asked to encourage students to attend an appointment with a Peer Educator in the Academic Resource Center. Faculty can choose to write their own email or alter the template. In most cases, faculty chose to send the template as follows:

Dear Student:

One of my central goals in teaching [CLASS] this quarter is to help as many of my students learn what they need to in order to succeed. To improve student success, I am taking a careful look at the performance of each student on the [ASSIGNMENT]. Based on your performance on the [ASSIGNMENT] you will need to make significant changes and improvements to succeed in this course.

I have arranged small group workshops and one-on-one coaching through the Academic Resource Center Early Assist Program to help you with any academic difficulties you might be facing. You will receive an email message from the Academic Resource Center specifying the available days and times for small group workshops with Peer Educators.

Please respond to the email soon after you receive it to ensure you can attend a workshop.

**In order for the Early Assist program to best serve you, please fill out this very short survey before you attend your small group workshop: [LINK]**

I also urge you to take advantage of other resources available to you for this class, including other Academic Resource Services, my office hours, and your TA's office hours. The sooner you ask for assistance, the better your chances for improvement. The Academic Resource Center services for this course are linked below.

Supplemental Instruction Schedule [LINK]

Drop-in Tutoring Schedule [LINK]

Study Skills Workshop Schedule [LINK]

Academic Resource Website [LINK]

Sincerely,

[PROFESSOR NAME]

This email was revised from previous versions. We added links to relevant ARC services to facilitate earlier referral to resources on campus. This email also exposes students to other ARC services in the event that they are not able to attend a group meeting.

## **Diagnostic Survey**

The email provides a link to a diagnostic survey that asks students to identify what issues they are having in the course so that the group meetings can be more tailored to students. The survey was developed using the most frequently identified issues in previous surveys from the Early Assist Program. The results for both fall and winter are provided in Table 1. Students were told to check all of the academic issues they were having: study skills, course content or demands, time management, or academic motivation or goals. Students were then asked to identify which of those four is their primary academic issue. Students also had the opportunity to express issues affecting their academic performance in an open-ended section. The most frequently reported academic issue was with study skills and the least reported was academic motivation or goals.

## **Early Assist Group Meetings**

Group meetings were scheduled between weeks 3 and 9 for the fall and between weeks 4 and 9 in the winter. Peer Educators go over strategies on how to be academically successful in their class and in general. They also touch on the four main areas of difficulty for students: study skills, course content, time management, and academic motivation. Peer Educators also discuss specific resources available for the course and refer them to other ARC services. After group meetings are held, students are able to schedule one-on-one meetings with Peer Educators if they would prefer a more individualized appointment.

## Methodology

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### Sample and Data Sources

Data were collected for the fall 2012 Early Assist evaluation using iLearn, AccuTrack, and student enrollment information. After faculty members input the early assessment grades on iLearn, we gathered student identification numbers for students who earned a low score on the early assessment and were identified as at-risk. We recorded students' participation in Early Assist and other ARC programs using AccuTrack. The Academic Resource Center (ARC) uses AccuTrack to monitor student usage of a variety of ARC programs. Students are required to sign in using AccuTrack when they enter the ARC. Course grades and student demographic characteristics were obtained through student enrollment and information system data provided by UCR.

In fall 2012, there were 3,558 students enrolled in the 9 courses and 17 sections participating in the program. Table 2 displays the number of at-risk students by class and the number of at-risk students who attended a group meeting or individual appointment for fall 2012. In fall 2012, 810 students (22.8%) were identified as at risk following the early assessment exercise. Over the course of the fall quarter, 236 (29.1%) students attended an EA group meeting or individual meeting. For the analysis, we compare the students who attended an EA meeting and did not drop the course (229) to the at-risk students who did not attend an EA meeting and did not use any other ARC services (414). Table 3 summarizes the background characteristics of the at-risk student population for fall 2012. Disproportionately more females (72.5%) participated in the EA program than males. Most of the students referred to EA were from CHASS (73.1%) even though 57% of students were enrolled in courses in mathematics or the sciences.

In winter 2013, there were 3,093 students enrolled in the 8 courses and 11 sections participating in Early Assist. Table 4 displays the number of at-risk students by class and the number of at-risk students who attended a group meeting or individual appointment. In winter 2013, 647 students (20.9%) were identified as at risk after completing the early assessment exercise. Only 183 students (28.3%) attended an Early Assist group meeting or individual appointment. For the winter 2013 analysis, we compare the students who attended an EA meeting (179) to the at-risk students who did not attend an EA meeting and did not use any other ARC services (308). Table 5 summarizes the background characteristics of the at-risk student population. A disproportionate amount of females participated in EA (61.8%) compared to males. More Hispanic students (52.5%) participated in the program compared to students of other ethnic backgrounds.

## Results

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### Participation

Tables 2 and 4 display the number of at-risk students per class and the participation rates for Early Assist meetings. The proportion of at-risk students in each course varies greatly. In the fall (Table X), Math 5 has the lowest at-risk student rate (8.1%). Psychology 1, Math 4, Entomology 10, Economics 2, and Business 10 referred less than 20% of their students to the program. Math

8B referred a high proportion of their students (43.3%) to the program. These patterns shifted in the winter quarter. Only two courses referred more than 20% of their students to Early Assist: Math 4 (31.7%) and Mechanical Engineering 2 (82.8%). In both fall and winter, almost one-third of at-risk students attended an EA meeting at the ARC. This translates to about 6% of all students enrolled in courses being supported by EA.

## Early Assessment Benchmarks

Faculty members participating in Early Assist are instructed to recommend students to the program who are at risk of failing their course based on an early assessment exercise. Faculty select the cut-off used to determine if students are at-risk. Figures 1 and 2 display the maximum grade students can earn and still be recommended to Early Assist and the average grade on the early assessment activity for at-risk students in that course. These scores are standardized by converting the raw score on each assessment to a percentage. Courses have been grouped, masking section numbers. In the fall, courses selected benchmarks between a C and an F (see Figure 1). Anthropology 1 was the only course that selected a C as a cut-off point for determining at-risk status. Business 10 and Entomology 10 selected cut-offs in the D+ range; Psychology 1 selected a cut-off in the D range; Economics 2 and Geology 9 selected cut-offs in the D- range, and the Math courses selected cut-offs in the F range. The average score on the early assessment exercise ranged from a D- to an F. Courses in the winter quarter (see Figure 2) selected lower cut-off points for their early assessments with the highest being a D+ in Sociology 5. Economics 2, Math 4, and Math 8B had cut-offs in the D- range while the rest of the courses selected cut-offs in the F range. In all cases, the average grade on the early assessment was in the F range.

## Timing of Email and EA Meeting

Early Assist is designed to alert students that they are at risk of failing a course. Students were emailed by their professor as early as week 1 in the fall and as early as week 3 in the winter (see Figure 3) of the 10-week quarter to alert them of their at-risk status and to urge them to attend an EA meeting. Figure 3 shows when students received their initial contact email by their professor and what week students attended an EA meeting for fall and winter. In the fall the first emails were sent to students during week 1 (11.8%). The largest proportion of emails was sent during week 5 (33.9%) right around mid-term exams. All students had received an email by week 6, right around the mid-term exam period. In the fall, students attended EA meetings beginning in week 3 and as late as week 9. Most students attended meetings during weeks 6 (33.5%) and 7 (25.4%). The results are similar for winter quarter. Students began receiving emails in week 3 (18.9%) through week 6. Most students received emails during week 4 (44.6%) and week 5 (35.4%). Students began attending EA meetings during week 4 (12.7%) through week 9. Most students attended meetings during week 5 (26.6%), 6 (37.3%), and 7 (20.3%).

## Use of Other ARC Services

While getting students to attend an EA meeting is the focus of the program, some students choose to use ARC services outside of the EA meeting or in addition to the EA meeting. Table 6 and 7 summarize the use of ARC services and/or EA meetings by at-risk students. In fall 2012, 384 (47.4%) at-risk students signed in to use at least one ARC service during the fall quarter (see Table 6). Most (70.3%) of the at-risk students who used the ARC received an email from their

professor before using the ARC. This suggests that the email from their professor may have had an impact. Of the at-risk students who used the ARC, 38.5% did not attend an EA meeting and another 38.0% attended an EA meeting. Almost 25% of at-risk students attended an EA meeting and used other ARC services. Only 27.8% of students who attended an EA meeting and used other services had attended the meeting before using other services.

These results are slightly lower for winter quarter. In the winter (see Table 7), only 50% of at-risk students attended an EA meeting and/or used other ARC services. Approximately 60% of those students received an email before using the ARC or attending an EA meeting. Over 40% used ARC services instead of an EA meeting while 27.5% used only an EA meeting. Almost 30% of at-risk students who used the ARC attended an EA meeting and used other ARC services. Almost 20% of students who used both services attended an EA meeting before other services. This suggests that students were already getting help at the ARC before going to an EA meeting.

Table 8 and 9 summarize the types of ARC services at-risk students used in fall and winter. Percentages are provided out of the entire at-risk population and out of the students who attended an EA meeting and/or used other ARC services. The most popular services used by at-risk students outside of an EA meeting was supplemental instruction and tutoring. The following section examines whether attending an EA meeting affects a student's final grade in their course.

### **Impact of EA on Final Course Grades**

T-tests were used to test for significant differences between average final course grades of at-risk students who attended an EA meeting compared to at-risk students who did not use any services provided by the ARC. Table 10 compares the average final course grades of the at-risk students who attended an EA meeting only to the at-risk students who did not use any ARC services in fall 2012. The average final course grades overall did not significantly differ between the two groups. The average final grade for both groups was within the C-minus range and are considered passing for most courses.

When examining the average final course grades by class, we find significant differences for Economics 2 and Entomology 10. Students who attended only an EA meeting in Economics 2 earned an average final course grade of 1.39 (D+) compared to a 0.92 (D-minus). We find similar results for Entomology 10. Students who attended only an EA meeting earned an average final course grade of 1.63 (D+) compared to a 0.91 (D-minus). In both cases, students would likely want to re-take the course for a better grade. All at-risk students in Anthropology 1 earned final course grades in the B range. Business 10 students earned grades in the B-minus to C range and students in Math 8B earned grades in the C range. Students in Geology 9 earned average course grades in the C-minus range while students in the rest of the courses earned grades that were D+ and below.

Table 11 compares all students who attended an EA meeting to at-risk students who did not use any ARC services. This table includes the students who attended an EA meeting and ARC services as well as students who only attended an EA meeting and nothing else. The results are very similar to Table 10 described above. There is no significant difference between the overall average course grades of students who attended an EA meeting and those who did not use any

ARC services. There is no longer a significant difference between the two groups in Entomology 10.

The results of the final course grade comparisons for winter 2013 can be found in Tables 12 and 13. There are no significant differences in final course grades between at-risk students who attended an EA meeting only and at-risk students who used no ARC services overall or at the course level. These results are the same when comparing all students who attended an EA meeting (including those who used ARC services in addition) to at-risk students who did not use any ARC services.

## User Satisfaction Survey

At the conclusion of the quarter, students were sent a link to an online survey to assess what students gleaned from the program and to ask for suggestions for improvement. The results of the surveys are provided in Tables 14-19 for fall and winter. Overall, students more often acknowledge receiving an email from their professor than the email from the ARC (see Tables 14 and 15). Most students participated in a group meeting than an individual meeting with a Peer Educator. Most students say they increased the amount of time they study as a result of the program and perceive an improvement in their grades even though we did not find improvement in most cases. Students also say the program continues to benefit them.

Tables 16 and 17 display additional student opinion data. In both fall and winter, most students agree that their EA meeting motivated them to be a better student, increased their confidence, and made them feel supported by UCR. The survey also had an open-ended section (see Tables 18 and 19) that asked students about how the program benefitted them, what they disliked, and what they would change about the program. Very few students filled out this section of the survey.

## Conclusion

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On average, the EA program showed no impact on course performance for fall 2012 and winter 2013 courses. Early warning participation did increase the final course grades of students in Economics 2 and Entomology 10 in fall 2012 compared to non-participants. Though there was a significant difference in final grade between students meeting with a Peer Educator and those not meeting with a Peer Educator in these courses, no significant differences were found in final course grades for the rest of the courses.

Emails were sent and group meetings occurred most frequently around mid-term exam times in fall and winter. This may still be too late for EA meetings to benefit the final grades of some students. We did see that some students elect to use ARC services instead of attending an EA meeting as well as in addition to an EA meeting. Of those who attended an EA meeting and ARC services, most students are attending ARC services before the EA meeting. Many students are receiving an email before they use ARC services or attend the EA meeting so it is possible that the email is having an impact on students being more proactive about improving their chances for success in the course.



**Table 1. Early Assist Diagnostic Survey**

<b>I. Academic Difficulty</b>		<b>Fall 12</b>		<b>Winter 13</b>	
<b>Academic Issues<sup>1</sup></b>		<b>313</b>	<b>%</b>	<b>167</b>	<b>%</b>
Study Skills		233	74.4%	105	62.9%
Course Content or Demands		183	58.5%	98	58.7%
Time Management		173	55.3%	87	52.1%
Academic Motivation or Goals		73	23.3%	38	22.7%
<b>Primary Academic Issue</b>		<b>313</b>	<b>%</b>	<b>167</b>	<b>%</b>
Study Skills		132	42.2%	53	31.7%
Course Content or Demands		102	32.6%	61	36.5%
Time Management		66	21.1%	45	27.0%
Academic Motivation or Goals		13	4.1%	8	4.8%
<b>II. Issues Affecting Academic Performance<sup>2</sup></b>		<b>65</b>	<b>20.8%</b>	<b>39</b>	<b>23.3%</b>
Personal Problems		18	27.7%	6	15.4%
Does not comprehend material		12	18.5%	7	17.9%
Not enough time to study		11	16.9%	7	17.9%
Distraction or stress		11	16.9%	3	7.7%
Working while going to school		8	12.3%	2	5.1%
Lack of testing skills		8	12.3%	6	15.4%
Does not know how or what to study		8	12.3%	5	12.8%
Motivation problems		7	10.8%	4	10.3%
Needs to review material		5	7.7%	3	7.7%
Involvement in extra-curricular activities		4	6.1%	0	0.0%
Problems with class format or professor		4	6.1%	6	15.4%

**Notes:**

1) The rows in white will not total 100% because peer mentors selected all issues identified by a student. Figures reported represent how many students responded to that category.

2) The rows in white will not total 100% because the comments from the students could have several different themes.

**Table 2. Participation Rates by Course Fall 2012**

	EA At-Risk Population <sup>a</sup>	Course Enrollment	EA At-Risk Rate	EA Appointment Attended <sup>b</sup>	EA Participation Rate
<b>Anthropology 1</b>	83	298	27.9%	11	13.3%
<b>Business 10</b>	61	325	18.8%	9	14.8%
<b>Economics 2</b>	93	535	17.4%	35	37.6%
<b>Entomology 10</b>	28	164	17.1%	16	57.1%
<b>Geology 9</b>	198	569	34.8%	61	30.8%
<b>Math 4 (001)</b>	20	148	13.5%	7	35.0%
<b>Math 4 (010)</b>	24	169	14.2%	8	33.3%
<b>Math 4 (020)</b>	27	109	24.8%	9	33.3%
<b>Math 4 Total</b>	71	426	16.7%	24	33.8%
<b>Math 5 (010)</b>	11	105	10.5%	2	18.2%
<b>Math 5 (020)</b>	7	71	10.0%	1	14.3%
<b>Math 5 (030)</b>	4	97	4.1%	1	25.0%
<b>Math 5 Total</b>	22	273	8.1%	4	18.2%
<b>Math 8B (001)</b>	52	90	57.8%	16	30.8%
<b>Math 8B (010)</b>	28	84	33.3%	9	32.1%
<b>Math 8B (020)</b>	39	72	54.2%	11	28.2%
<b>Math 8B (030)</b>	35	83	42.2%	6	17.1%
<b>Math 8B (040)</b>	19	70	27.1%	4	21.1%
<b>Math 8B Total</b>	173	399	43.4%	46	26.6%
<b>Psychology 1</b>	81	569	14.2%	30	37.0%
<b>Total</b>	810	3558	22.8%	236	29.1%

a EA participation is determined by early assessment grades extracted from iLearn.

b Number of students who logged in for their group appointment via AccuTrack

**Table 3. Background Characteristics of At-Risk Fall 2012**

	At-Risk EA Participants		At-Risk Non-Participants <sup>a</sup>		All At-Risk	
	Mean (SD)	N	Mean (SD)	N	Mean (SD)	N
<b>Academic Chars</b>						
<b>High School GPA</b>	3.49 (0.30)	221	3.40 (0.31)	403	3.45 (0.32)	764
<b>SAT Verbal</b>	471.71 (78.19)	217	485.97 (73.72)	395	487.36 (77.13)	745
<b>SAT Math</b>	488.71 (94.07)	217	520.08 (90.66)	395	571.53 (93.68)	745
<b>SAT Writing</b>	483.50 (84.44)	217	495.24 (85.34)	395	496.48 (86.61)	745
<b>SAT Composite</b>	1443.92 (217.27)	217	1501.29 (207.70)	395	1501.37 (216.73)	745
<b>Fall 2012 Cum GPA</b>	2.46 (0.56)	236	2.33 (0.68)	426	2.40 (0.64)	810
<b>Demographics</b>	%	N	%	N	%	N
<b>Female</b>	72.5%	171	56.2%	239	59.3%	480
<b>Male</b>	27.5%	65	43.8%	186	40.7%	329
<b>Hispanic</b>	54.7%	129	42.5%	187	44.8%	363
<b>Asian</b>	27.1%	64	35.9%	158	35.6%	288
<b>Caucasian</b>	8.9%	21	8.6%	38	8.9%	72
<b>African American</b>	7.6%	18	6.8%	30	8.5%	69
<b>Native American</b>	0.4%	1	0.7%	3	0.5%	4
<b>Unknown/Other</b>	1.3%	3	2.2%	10	1.7%	14
<b>Freshmen</b>	50.9%	120	56.3%	240	58.5%	474
<b>Sophomore</b>	31.4%	74	25.1%	107	24.7%	200
<b>Junior</b>	11.9%	28	11.7%	50	11.1%	90
<b>Senior</b>	5.9%	14	6.8%	29	5.7%	46
<b>BCoE</b>	3.4%	8	2.4%	10	6.3%	51
<b>CNAS</b>	18.6%	44	12.7%	54	20.4%	165
<b>CHASS</b>	78.0%	184	84.5%	360	73.1%	592
<b>SoBA</b>	0.0%	0	0.5%	2	0.3%	2
<b>First Generation</b>	69.9%	165	68.1%	290	65.4%	530
<b>Not First Gen</b>	30.1%	71	31.9%	136	34.6%	280
<b>Low Income</b>	56.8%	134	47.9%	204	48.3%	391
<b>Not Low Income</b>	43.2%	102	52.1%	222	51.7%	419

<sup>a</sup> Non-participants are students who did not attend an EA meeting and did not use other ARC services

**Table 4. Participation Rates by Course Winter 2013**

	EA At-Risk Population <sup>a</sup>	Course Enrollment	EA At-Risk Rate	EA Appointment Attended <sup>b</sup>	EA Participation Rate
<b>Biology 5A (001)</b>	44	299	14.7%	16	36.4%
<b>Biology 5A (040)</b>	73	565	12.9%	24	32.9%
<b>Biology 5A (Total)</b>	117	864	13.5%	40	34.2%
<b>Economics 2</b>	108	554	19.5%	26	24.1%
<b>Math 4 (001)</b>	96	303	31.7%	31	32.3%
<b>Math 8B (010)</b>	7	65	10.8%	2	28.6%
<b>Math 8B (020)</b>	10	66	15.2%	2	20.0%
<b>Math 8B (030)</b>	12	72	16.7%	3	25.0%
<b>Math 8B Total</b>	29	203	14.3%	7	24.1%
<b>Mechanical Engineering 2</b>	120	145	82.8%	33	27.5%
<b>Psychology 2</b>	95	558	17.0%	20	21.0%
<b>Sociology 5</b>	26	161	16.1%	6	23.1%
<b>Statistics 48</b>	56	305	18.4%	20	35.7%
<b>Total</b>	647	3093	20.9%	183	28.3%

a EA participation is determined by early assessment grades extracted from iLearn.

b Number of students who logged in for their group appointment via AccuTrack

**Table 5. Background Characteristics of At-Risk Winter 2013**

Academic Chars	At-Risk EA Participants		At-Risk Non-Participants <sup>a</sup>		All At-Risk	
	Mean (SD)	N	Mean (SD)	N	Mean (SD)	N
High School GPA	3.59 (0.30)	177	3.48 (0.32)	285	3.54 (0.32)	600
SAT Verbal	485.58 (77.91)	172	497.64 (76.66)	280	497.13 (78.10)	585
SAT Math	521.16 (89.44)	172	542.61 (92.34)	280	540.87 (91.79)	585
SAT Writing	503.95 (79.70)	172	506.89 (77.64)	280	510.22 (77.55)	585
SAT Composite	1510.70 (208.61)	172	1547.14 (199.74)	280	1548.22 (204.75)	585
Winter 2013 Cum GPA	2.53 (0.50)	183	2.33 (0.60)	323	2.42 (0.57)	647
<b>Demographics</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>
Female	61.8%	113	50.5%	163	53.8%	348
Male	38.2%	70	49.5%	160	46.2%	299
Hispanic	52.5%	96	36.6%	121	43.0%	278
Asian	30.0%	55	39.0%	129	37.3%	241
Caucasian	9.8%	18	13.3%	44	11.9%	77
African American	6.0%	11	7.9%	26	6.8%	44
Native American	0.0%	0	0.0%	0	0.0%	0
Unknown/Other	1.6%	3	0.9%	3	1.1%	7
Freshmen	51.9%	95	43.3%	140	50.5%	327
Sophomore	33.9%	62	32.2%	104	32.2%	208
Junior	9.8%	18	18.0%	58	12.4%	80
Senior	4.4%	8	6.5%	21	5.0%	32
BCoE	22.4%	41	16.1%	52	21.6%	140
CNAS	22.4%	41	12.7%	41	20.3%	131
CHASS	55.2%	101	70.3%	227	57.7%	373
SoBA	0.0%	0	0.9%	3	0.5%	3

<sup>a</sup> Non-participants are students who did not attend an EA meeting and did not use other ARC services

**Table 6. ARC/EA Summary Fall 2012****N=810**

	<b>N</b>	<b>Percent</b>
<b>How many students used ARC services and/or attended an EA Meeting?</b>	384	47.4%
<b>How many received an email before using ARC services or attending an EA meeting? (N=384)</b>	270	70.3%
<b>How many only used ARC services (no EA meeting)? (N=384)</b>	148	38.5%
<b>How many only attended an EA meeting? (N=384)</b>	146	38.0%
<b>How many attended an EA meeting and used ARC services? (N=384)</b>	90	23.4%
<b>How many attended an EA meeting before using ARC services? (N=90)</b>	25	27.8%

**Table 7. ARC/EA Summary Winter 2013****N=647**

	<b>N</b>	<b>Percent</b>
<b>How many students used ARC services and/or attended an EA Meeting?</b>	324	50.1%
<b>How many received an email before using ARC services or attending an EA meeting? (N=324)</b>	196	60.5%
<b>How many only used ARC services (no EA meeting)? (N=324)</b>	142	43.8%
<b>How many only attended an EA meeting? (N=324)</b>	89	27.5%
<b>How many attended an EA meeting and used ARC services? (N=324)</b>	94	29.0%
<b>How many attended an EA meeting before using ARC services? (N=94)</b>	18	19.2%

**Table 8. ARC Service Use Fall 2012**

	<b>Number of Students</b>	<b>Percent of ARC Users N=384</b>	<b>Percent of Total At-Risk N=810</b>
<b>Early Assist Group Meeting</b>	195	50.8%	24.1%
<b>Early Assist Individual Meeting</b>	62	16.1%	7.7%
<b>Early Assist Follow-Up Meeting</b>	22	5.7%	9.3%
<b>Supplemental Instruction</b>	163	42.4%	20.1%
<b>Tutoring</b>	85	22.1%	10.5%
<b>Study Skills Workshops</b>	19	4.9%	2.4%
<b>Assistance Counseling Encouragment (ACE)</b>	18	4.7%	2.2%
<b>Peer Counseling</b>	6	1.6%	0.7%



**Table 9. ARC Service Use Winter 2013**

	<b>Number of Students</b>	<b>Percent of ARC Users N=324</b>	<b>Percent of Total At-Risk N=647</b>
<b>Early Assist Group Meeting</b>	152	46.9%	23.5%
<b>Early Assist Individual Meeting</b>	48	14.8%	7.4%
<b>Early Assist Follow-Up Meeting</b>	15	4.6%	2.3%
<b>Supplemental Instruction</b>	169	52.2%	26.1%
<b>Tutoring</b>	41	12.7%	6.3%
<b>Computer Lab</b>	24	7.4%	3.7%
<b>Study Skills Workshops</b>	4	1.2%	0.6%
<b>Independent Study</b>	3	0.9%	0.5%
<b>Peer Counseling</b>	2	0.6%	0.3%
<b>Assistance Counseling Encouragment (ACE)</b>	1	0.3%	0.1%

**Table 10. Average Course Grade for Students who only Attended an EA Meeting Fall 2012<sup>a</sup>**

	EA At-Risk Attended Meeting, Did not use other ARC Services		EA At-Risk Did not Attend Meeting, Did not use other ARC Services	
	Mean (Std. Error)	N	Mean (Std. Error)	N
<b>Course Grade</b>	1.71 (0.09)	142	1.89 (0.06)	414
<b>Anthropology 1</b>	3.06 (0.31)	7	3.08 (0.10)	57
<b>Business 10</b>	2.72 (0.20)	6	2.18 (0.12)	46
<b>Economics 2</b>	1.39* (0.15)	21	0.92* (0.11)	54
<b>Entomology 10</b>	1.63* (0.18)	12	0.91* (0.28)	10
<b>Geology 9</b>	1.93 (0.15)	48	1.95 (0.10)	123
<b>Math 4</b>	1.21 (0.30)	19	1.43 (0.20)	36
<b>Math 5</b>	0.85 (0.85)	2	1.37 (0.39)	12
<b>Math 8B</b>	2.08 (0.38)	9	2.27 (0.15)	36
<b>Psychology 1</b>	1.11 (0.18)	18	1.49 (0.12)	40

\* Indicates statistically significant at the 0.05 level.

<sup>a</sup> Students attended an EA meeting and did not use any other ARC services

**Table 11. Average Course Grade for Students who Attended an EA Meeting Fall 2012<sup>a</sup>**

	EA At-Risk Attended Meeting		EA At-Risk Did not Attend Meeting, Did not use other ARC Services	
	Mean (Std. Error)	N	Mean (Std. Error)	N
<b>Course Grade</b>	1.81 (0.07)	229	1.89 (0.06)	414
<b>Anthropology 1</b>	3.34 (0.23)	11	3.08 (0.10)	57
<b>Business 10</b>	2.41 (0.61)	9	2.18 (0.12)	46
<b>Economics 2</b>	1.36* (0.13)	34	0.92* (0.11)	54
<b>Entomology 10</b>	1.53 (0.21)	15	0.91 (0.28)	10
<b>Geology 9</b>	1.98 (0.14)	60	1.95 (0.10)	123
<b>Math 4</b>	1.18 (0.25)	24	1.43 (0.20)	36
<b>Math 5</b>	1.60 (0.57)	4	1.37 (0.39)	12
<b>Math 8B</b>	2.30 (0.15)	43	2.72 (0.15)	36
<b>Psychology 1</b>	1.24 (0.14)	29	1.49 (0.12)	40

\* Indicates statistically significant at the 0.05 level (one-tailed).

<sup>a</sup> All students attended an EA meeting. Some students also used ARC services.

**Table 12. Average Course Grade for Students who only Attended an EA Meeting Winter 2013<sup>a</sup>**

	EA At-Risk Attended Meeting, Did not use other ARC Services		EA At-Risk Did not Attend Meeting, Did not use other ARC Services	
	Mean (Std. Error)	N	Mean (Std. Error)	N
<b>Course Grade</b>	1.45 (0.12)	88	1.47 (0.06)	308
<b>Biology 5A (Total)</b>	1.60 (0.30)	6	1.09 (0.14)	32
<b>Economics 2</b>	1.54 (0.23)	16	1.38 (0.13)	65
<b>Math 4 (001)</b>	1.13 (0.23)	24	0.98 (0.15)	52
<b>Math 8B (Total)</b>	1.25 (0.48)	4	1.53 (0.24)	12
<b>Mechanical Engineering 2</b>	1.84 (0.54)	7	1.92 (0.21)	41
<b>Psychology 2</b>	2.39 (0.23)	11	2.12 (0.12)	58
<b>Sociology 5</b>	0.00 (0.00)	3	1.61 (0.29)	19
<b>Statistics 48</b>	1.27 (0.25)	15	0.93 (0.19)	29

\* Indicates statistically significant at the 0.05 level.

<sup>a</sup> Students attended an EA meeting and did not use any other ARC services

**Table 13. Average Course Grade for Students who Attended an EA Meeting Winter 2013<sup>a</sup>**

	EA At-Risk Attended Meeting		EA At-Risk Did not Attend Meeting, Did not use other ARC Services	
	Mean (Std. Error)	N	Mean (Std. Error)	N
<b>Course Grade</b>	1.54 (0.09)	179	1.47 (0.06)	308
<b>Biology 5A (Total)</b>	1.34 (0.13)	39	1.09 (0.14)	32
<b>Economics 2</b>	1.54 (0.17)	25	1.38 (0.13)	65
<b>Math 4 (001)</b>	1.19 (0.21)	31	0.98 (0.15)	52
<b>Math 8B (Total)</b>	1.76 (0.37)	7	1.53 (0.24)	12
<b>Mechanical Engineering 2</b>	1.85 (0.27)	32	1.92 (0.21)	41
<b>Psychology 2</b>	2.51 (0.18)	19	2.12 (0.12)	58
<b>Sociology 5</b>	1.12 (0.73)	6	1.61 (0.29)	19
<b>Statistics 48</b>	1.15 (0.20)	20	0.93 (0.19)	29

\* Indicates statistically significant at the 0.05 level (one-tailed).

<sup>a</sup> All students attended an EA meeting. Some students also used ARC services.

**Table 14. Early Assist End of Quarter Survey Fall 2012**

<b>I. Participation in the Program</b>		
<b>Early Assist Email</b>	<b>24</b>	<b>%</b>
Received email from Instructor	13	54.2%
Received email from ARC	4	16.7%
Received email from Both Instructor and ARC	7	29.2%
<b>Participation in Early Assist<sup>1</sup></b>	<b>24</b>	<b>%</b>
Participated in a Group Workshop	18	75.0%
Participated in an Individual Peer Educator Meeting	7	29.2%
Participated in Both a Group Workshop and an Individual Peer Educator Meeting	2	8.3%
<b>II. Changes in Academic Habits</b>		
<b>Seeking Outside Assistance<sup>1</sup></b>	<b>24</b>	<b>%</b>
Attended Additional Services at the ARC	5	20.8%
Attended the Instructor's Office Hours	4	16.7%
Sought Support from Other Campus Resources	1	4.2%
<b>Taking Personal Action<sup>1</sup></b>	<b>24</b>	<b>%</b>
Increased Study Time	19	79.2%
Attended the Lectures	5	20.8%
Did not Influence the Student to Change	3	12.5%
Purchased the Text	2	8.3%
<b>III. Impact of the Program</b>		
<b>Grade Improvement</b>	<b>24</b>	<b>%</b>
Yes	15	62.5%
No	9	37.5%
<b>Program Continues to Benefit the Student</b>	<b>24</b>	<b>%</b>
Yes	16	66.7%
No	8	33.3%

**Notes:**

1) The rows in white will not total 100% because students could mark more than one category. Figures reported represent how many students responded to that category.

**Table 15. Early Assist End of Quarter Survey Winter 2013**

<b>I. Participation in the Program</b>		
<b>Early Assist Email</b>	<b>46</b>	<b>%</b>
Received email from Instructor	27	57.5%
Received email from ARC	3	6.4%
Received email from Both Instructor and ARC	16	34.0%
<b>Participation in Early Assist<sup>1</sup></b>	<b>47</b>	<b>%</b>
Participated in a Group Workshop	35	74.5%
Participated in an Individual Peer Educator Meeting	4	8.5%
Participated in Both a Group Workshop and an Individual Peer Educator Meeting	10	21.3%
<b>II. Changes in Academic Habits</b>		
<b>Seeking Outside Assistance<sup>1</sup></b>	<b>47</b>	<b>%</b>
Attended the Instructor's Office Hours	18	38.3%
Attended Additional Services at the ARC	9	19.2%
Sought Support from Other Campus Resources	8	17.0%
<b>Taking Personal Action<sup>1</sup></b>	<b>47</b>	<b>%</b>
Increased Study Time	34	72.3%
Attended the Lectures	14	29.8%
Did not Influence the Student to Change	7	14.9%
Purchased the Text	4	8.5%
<b>III. Impact of the Program</b>		
<b>Grade Improvement</b>	<b>47</b>	<b>%</b>
Yes	31	66.0%
No	16	34.0%
<b>Program Continues to Benefit the Student</b>	<b>47</b>	<b>%</b>
Yes	35	74.5%
No	12	25.5%

**Notes:**

1) The rows in white will not total 100% because students could mark more than one category. Figures reported represent how many students responded to that category.

**Table 16. Early Assist End of Quarter Survey Opinion Fall 2012 N=24**

	Strongly Disagree	Disagree	Agree	Strongly Agree
<b>Opinion of the Program</b>				
The workshop/individual meeting motivated me to be a better student	4.2%	16.7%	54.2%	25.0%
The workshop/individual meeting increased my confidence in my academic abilities	8.3%	16.7%	45.8%	29.2%
The Early Assist program made me feel supported by UCR	8.3%	8.3%	50.0%	33.3%

**Table 17. Early Assist End of Quarter Survey Opinion Winter 2013 N=47**

	Strongly Disagree	Disagree	Agree	Strongly Agree
<b>Opinion of the Program</b>				
The workshop/individual meeting motivated me to be a better student	0.0%	17.0%	55.3%	27.7%
The workshop/individual meeting increased my confidence in my academic abilities	4.3%	23.4%	51.0%	21.3%
The Early Assist program made me feel supported by UCR	2.1%	4.3%	55.3%	38.3%



**Table 18. Early Assist End of Quarter Survey Open-Ended  
Fall 2012**

<b>I. How has the program benefited the student?</b>	<b>11</b>	<b>45.8%</b>
The student found out about other ARC services/ has a place to go for help	5	45.4%
The program has improved the student's study skills	5	45.4%
The program improved the student's time management skills	2	18.2%
The program improved the student's confidence	2	18.2%
The program has improved class attendance	1	9.1%
The program has not benefitted the student	1	9.1%
<b>II. What did you dislike about the program?</b>	<b>13</b>	<b>54.2%</b>
The student liked everything	7	53.8%
The program did not focus on course content	2	15.4%
The attendance was low	1	7.7%
The tutors /peer advisors were not helpful	1	7.7%
The introductions took too long	1	7.7%
The meetings are too short	1	7.7%
<b>III. What would you change about the program?</b>	<b>12</b>	<b>50.0%</b>
Nothing	8	66.7%
Make it mandatory or attempt to draw more students	2	16.7%
Focus more on course content	1	8.3%
Hire more competent staff	1	8.3%
<b>IV. Comments or suggestions for improvement</b>	<b>8</b>	<b>33.3%</b>
Keep it as-is	4	50.0%
Make it mandatory or attempt to draw more students	2	25.0%
Keep the study hours worksheet	1	12.5%
Focus more on course content	1	12.5%

**Notes:**

The rows in white will not total 100% because the comments from the students could have several different themes.

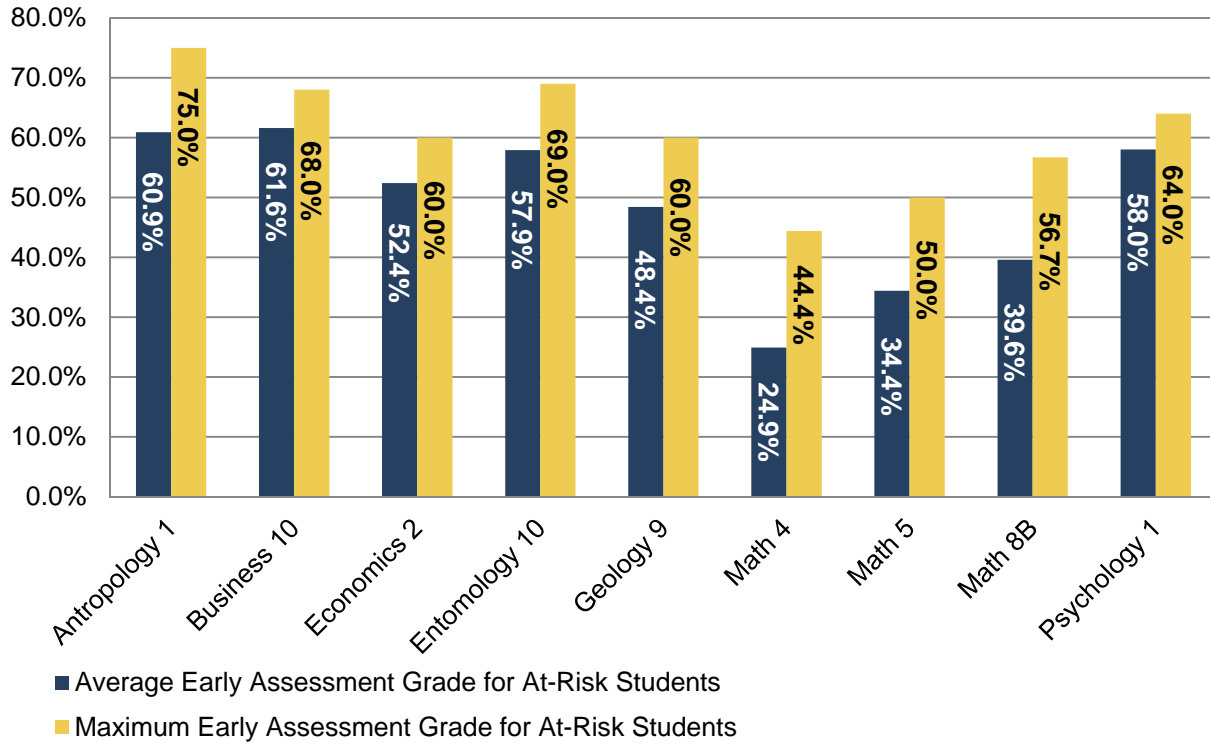
**Table 19. Early Assist End of Quarter Survey Open-Ended Winter 2013**

<b>I. How has the program benefited the student?</b>	<b>15</b>	<b>31.9%</b>
The program has improved the student's study skills	7	46.7%
The student found out about other ARC services/ has a place to go for help	4	26.7%
The program motivated the student to perform better	3	20.0%
The program improved the student's problem solving skills	2	13.3%
The program improved the student's time management skills	1	6.7%
The program did not benefit the student	1	6.7%
<b>II. What did you dislike about the program?</b>	<b>16</b>	<b>34.0%</b>
The program did not focus on course content	5	31.2%
The student liked everything	4	25.0%
The meetings were awkward or too public	3	18.8%
The meetings are too short	2	12.5%
The attendance was low	1	6.2%
The meetings were not personalized to individual needs	1	6.2%
The meetings should be required	1	6.2%
<b>III. What would you change about the program?</b>	<b>16</b>	<b>34.0%</b>
Focus more on course content	6	37.5%
Nothing	5	31.2%
Extend the length of the meetings	2	12.5%
Make it mandatory or attempt to draw more students	1	6.2%
Change to one on one meetings to avoid embarrassment	1	6.2%
Personalize by problem areas	1	6.2%
<b>IV. Comments or suggestions for improvement</b>	<b>11</b>	<b>23.4%</b>
Keep it as-is	5	45.4%
Focus more on course content	3	27.3%
Approach the student in a more friendly way/ don't scare them	1	9.1%
Extend the program (more meetings/more subjects)	1	9.1%
Allow substitution for homework grades/extra credit	1	9.1%

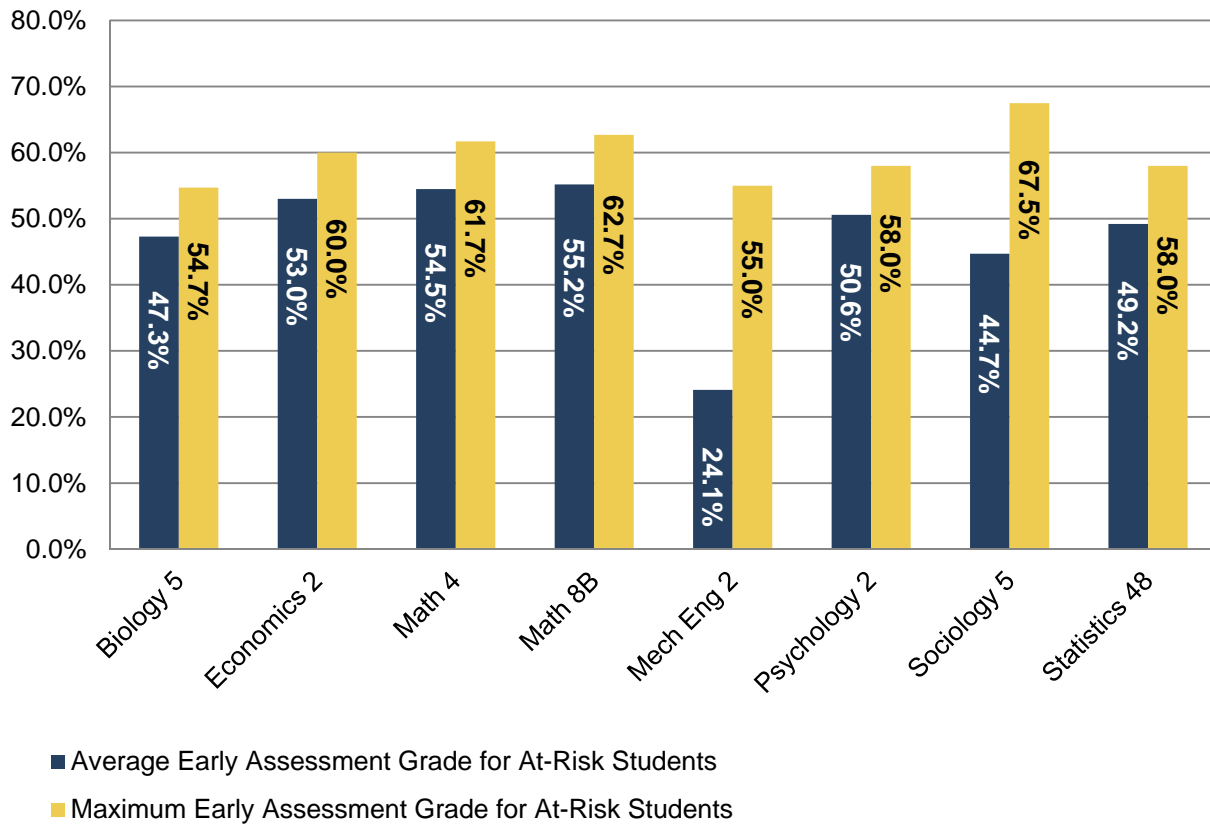
**Notes:**

The rows in white will not total 100% because the comments from the students could have several different themes.

**Figure 1. Early Assessment Grades for At-Risk Students**



**Figure 2. Early Assessment Grades for At-Risk Students**



### Figure 3. Timing of Email and EA Meeting

