

## Research In Brief

<http://www.palomar.edu/irp/>

### Pre-AA Reading Tracking Study

**Introduction:** The current study was done as part of a Spring 2007 research initiative focused on students who enter into Palomar's Reading, English, ESL or Math credit course curriculum at the Pre-AA Level. The information objectives of the research included describing such students in terms of their:

- Demographics;
- Course Flow (progress);
- Term-to-term persistence.

**Caveat:** All information that will be shared herein is "descriptive" in nature. There is no intention here to draw conclusions regarding cause and effect.

**Methodology:** The research was executed in the form of a *cohort* tracking study. A *cohort* is a group of students who share common characteristics. In this case, cohorts were formed based on two characteristics:

- Level of students' first Reading course;
  - Pre-AA (Catalog#'s 1-49)
  - AA Degree Applicable (50-99)
  - Transfer Level (100 and above)
- Term that first course was attempted.

For the purpose of forming the cohorts, only transcript grade enrollments were considered (i.e. grades of A, B, C, CR, D, F, FW, NC, W). Grade files were searched back through Summer'88 to find the first term in which a given student enrolled in a Reading course. The level of that course was then classified as Pre-AA, AA or Transfer level based on its catalog number. In cases where students enrolled in more than one

course during their first Reading enrollment term, the lowest catalog number was used for classification purposes. Students whose first Reading course was taken prior to Summer'95 were eliminated from the study to optimize correct identification of "first" Reading enrollments at Palomar. Sacrificing the Summer'88 through Spring'95 data ensured that the identified course was the first Reading course taken in at least seven years.

For the 24 terms beginning Summer'95 and ending Spring'03, a total of 2,180 students were identified whose first Reading enrollment was at Pre-AA Level and was taken during the respective term (see Table 1). The course taking behaviors and course outcomes for each of those students were then tracked for four years (12 terms). Thus, the most recent cohort that could be tracked was Summer'03 since their twelfth term fell in Fall'06 -- which was the last term for which grades were available for analysis. All 24 terms of Reading Pre-AA entry cohorts were collapsed together for the purposes of the analyses that follow.

**Table 1**  
**Pre-AA Reading Cohort Sizes**

	Summer	Fall	Spring	Total
2002-03	51	127	77	255
2001-02	37	109	95	241
2000-01	52	109	60	221
1999-00	51	87	69	207
1998-99	39	137	111	287
1997-98	49	166	133	348
1996-97	32	166	139	337
1995-96	33	135	116	284
Total:	344	1,036	800	<b>2,180</b>

**Demographics:** In order to put demographics of the Reading Pre-AA students in perspective, Table 2 contrasts them against the demographics of students who entered the Reading curriculum at AA Level or higher. The methodology used to form the latter cohorts paralleled that described on the first page.

**Table 2**

**Demographics of Reading Pre-AA Entry Cohorts  
Versus Cohorts that Entered at AA Level or Higher**

	Pre-AA Level	AA Level	Transfer Level
<b># in Cohort</b>	<b>2,180</b>	<b>2,282</b>	<b>2,754</b>
<b>Gender</b>			
Female	56%	52%	50%
Male	44%	48%	50%
<b>Ethnicity</b>			
Asian/PI	9%	6%	6%
Black	8%	6%	4%
Filipino	2%	4%	3%
Hispanic	35%	30%	16%
Nat.Am.	2%	2%	1%
White	36%	46%	62%
Unknown	7%	5%	8%
<b>Age</b>			
17 & Under	14%	9%	11%
18-20	36%	60%	54%
21-24	12%	10%	12%
25-29	8%	7%	7%
30-34	8%	5%	4%
35 & Over	21%	10%	11%
<b>Full-Time First Semester</b>			
Yes	31%	60%	60%
No	69%	40%	40%
<b>Citizenship</b>			
Yes	80%	86%	94%
No	20%	14%	6%
<b>Had Financial Aid First Year</b>			
Yes	36%	31%	18%
No	64%	69%	82%
<b>EOPS First Semester</b>			
Yes	18%	15%	6%
No	82%	85%	94%

- Gender: Pre-AA Reading students are disproportionately more female than male (56%/44%) but that split evens out to 50/50 by Transfer Level
- Ethnicity: Pre-AA cohorts are diverse and include a full 35% who are Hispanic
- Age: Pre-AA students are less likely to be in the 18-20 age group (36%) than are their AA Level (60%) and Transfer Level

(54%) counterparts, however those 35 & over are well represented at 21% versus only 10% for AA and 11% for Transfer Levels

- Full-Time/Part-Time Status: Over two thirds (69%) of students who entered Reading at Pre-AA Level were part-time in their first semester -- 29 percentage points more than those who entered at AA or Transfer Level
- Financial Aid/EOPS Status: Over a third (36%) of Pre-AA Reading students had financial aid during their first academic year and one in five (18%) was in EOPS their first Reading term

**Performance in Pre-AA Reading:** The key performance measures summarized in Table 3 include:

- Number of enrollments;
- Success rate (count of A,B,C,CR grades divided by total A,B,C,CR,D,F,FW,NC, W grades);
- Retention rate (count of non-W grades divided by total grades);
- Success units (earned with grades of A,B,C, or CR);
- Number of terms until first success grade.

**Table 3**

**Performance in Pre-AA Reading  
Within 4 Years (12 Terms) of Cohort Entry**

	Number of Cohort Members = 2,180	
	Passed A,B,C,CR	Never Passed
<b>READ</b>		
#Students	1,392	788
%Students	64%	36%
Avg Enrolls	1.63	1.14
Success Rate	88%	
Retention Rate	98%	87%
Avg Success Units	2.45	
Avg Terms to 1st Success	1.15	

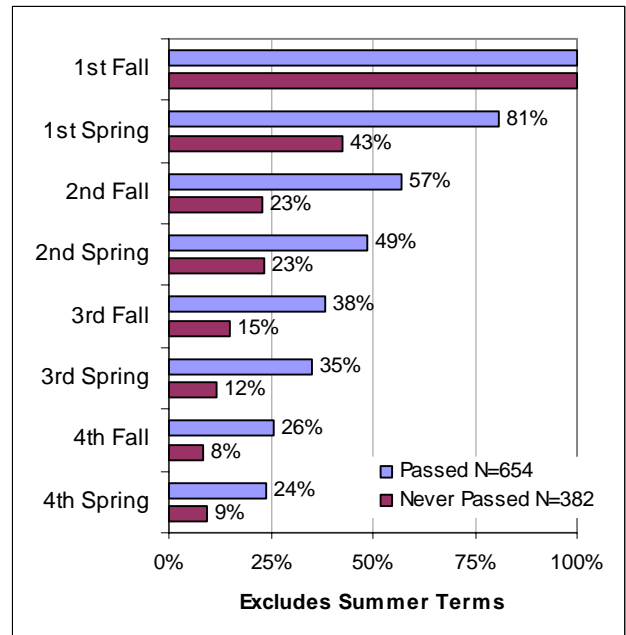
- Almost two thirds (64%) of Reading Pre-AA students passed one or more Pre-AA Reading courses during the 4 years they were tracked.
- However, the remaining 36% never passed Pre-AA Reading during that 4-year period of time.

- Those who passed averaged about half an enrollment more than those who never passed (1.63 versus 1.14).
- Those who passed exhibited an 88% success rate in the Pre-AA Reading courses they took.
- Retention in Pre-AA Reading was 11 percentage points higher among those who passed (98% versus 87%).
- Those who passed earned an average of 2.45 success units in Pre-AA Reading.
- On average, those who passed took slightly over one term (1.15) to achieve their first success in Pre-AA Reading.

- On Average, it took those students 3.38 terms (one year plus about half a term) to pass their first AA Level Reading course.
- One in ten (10%) passed a Transfer Level Reading course.
- On Average, it took those students 3.11 terms (slightly over a year) to pass their first Transfer Level Reading course.

**Term-to-Term Persistence:** Figure 1 displays the persistence rates of all Fall Reading Pre-AA cohorts from one primary term to the next.

**Figure 1**  
**Reading Pre-AA Students**  
**Term-to-Term Persistence**  
**(Fall Cohorts Only)**



**Flow Through the Reading Curriculum:** Table 4 shows the extent to which the Reading Pre-AA students progressed through higher levels of the Reading course curriculum.

**Table 4**  
**Performance in Higher Level Reading Courses**  
**Within 4 Years (12 Terms) of Cohort Entry**

Number of Cohort Members = 2,180	Passed A,B,C,CR			Never Didn't Pass Take
	Passed	Never	Didn't	
<b>READ</b>	<b>AA Level (50-99)</b>			
#Students	277	73	1,830	
%Students	13%	3%	84%	
Avg Enrolls	1.15	1.15		
Success Rate	94%			
Retention Rate	97%	77%		
Avg Success Units	4.32			
Avg Terms to 1st Success	3.38			
<b>READ</b>	<b>Transfer Level (100+)</b>			
#Students	226	94	1,860	
%Students	10%	4%	85%	
Avg Enrolls	1.15	1.06		
Success Rate	95%			
Retention Rate	99%	85%		
Avg Success Units	3.01			
Avg Terms to 1st Success	3.11			

- One of every eight (13%) passed an AA Level Reading course.

- Students who passed a Pre-AA Reading course exhibited considerably more persistence than their counterparts who never passed such a course.
- By the fourth Spring since their initial entry, one in four (24%) of students who passed were still enrolling in Palomar courses versus only one in eleven (9%) of those who never passed.

**Table 5**  
**4-Year (12 Term) Progress of Reading Pre-AA Entry Cohorts in Other Subjects**

Number of Cohort Members = 2,180	Pre-AA Level (1-49)			AA Level (50-99)			Transfer Level (100+)		
	Passed A,B,C,CR	Never Passed	Didn't Take	Passed A,B,C,CR	Never Passed	Didn't Take	Passed A,B,C,CR	Never Passed	Didn't Take
<b>ENG</b>									
#Students	336	316	1,528	240	134	1,806	258	71	1,851
%Students	15%	14%	70%	11%	6%	83%	12%	3%	85%
Avg Enrolls	1.33	1.27		1.25	1.36		1.46	1.15	
Success Rate	75%			80%			88%		
Retention Rate	96%	76%		96%	75%		96%	71%	
Avg Success Units	4.00			3.99			5.04		
Avg Terms to 1st Success	3.08			4.80			5.95		
<b>ESL</b>									
#Students	143	24	2,013	50	6	2,124	139	25	2,016
%Students	7%	1%	92%	2%	0%	97%	6%	1%	92%
Avg Enrolls	2.62	1.13		1.64	1.00		2.38	1.44	
Success Rate	82%			91%			84%		
Retention Rate	97%	70%		98%	83%		98%	81%	
Avg Success Units	5.51			3.52			9.73		
Avg Terms to 1st Success	2.40			3.08			2.96		
<b>MATH</b>									
#Students	402	341	1,437	326	186	1,668	145	41	1,994
%Students	18%	16%	66%	15%	9%	77%	7%	2%	91%
Avg Enrolls	1.75	1.42		2.31	1.65		2.32	1.37	
Success Rate	69%			61%			74%		
Retention Rate	95%	74%		90%	72%		93%	73%	
Avg Success Units	3.27			5.51			6.29		
Avg Terms to 1st Success	3.13			3.91			4.91		
<b>Other Subjects</b>									
#Students	241	60	1,879	365	134	1,681	1,368	393	419
%Students	11%	3%	86%	17%	6%	77%	63%	18%	19%
Avg Enrolls	2.55	1.13		1.85	1.37		9.03	2.32	
Success Rate	86%			84%			70%		
Retention Rate	96%	68%		97%	86%		92%	76%	
Avg Success Units	4.72			2.37			16.71		
Avg Terms to 1st Success	2.93			2.85			2.09		

**Performance in Other Disciplines:** Table 5 shows performance of the Reading Pre-AA students in other coursework they took during the 4-year tracking period. English, ESL and Math are shown separately, while all other non-Reading disciplines are rolled together into the “Other Subjects” category.

- Generally, Reading Pre-AA students did not enroll in ESL courses -- the percent who *Didn't Take* ranged from 92% to 97%.
- Pre-AA English was taken by 30%, AA Level English by 17% and Transfer Level by 15% -- the percentages who passed were 15%, 11% and 12%, respectively.

- Pre-AA Math was taken by 34%, AA Level Math by 23% and Transfer Level by 9% -- the percentages who passed were 18%, 15% and 7%, respectively.
- Most (81% i.e. 100% minus the 19% who *Didn't Take*) enrolled in “Other” Transfer Level courses.
- Those who were successful in Other Transfer Level courses earned, on average, 16.71 units.

**Overall 4-Year Progress:** As was reported earlier (Table 3), not all Reading Pre-AA students actually passed a Pre-AA Reading course – 64% did and 36% did not. Moreover, in Figure 1 it was noted that those two types of

students differed substantially in terms of their term-to-term persistence – those who passed a Pre-AA Reading course were much more likely to persist. Thus, it would be of interest to quantify the “overall” progress that those two types of students made over the course of the 4-year (12 term) tracking period. Table 6 attempts to accomplish that objective by using average success units earned as the metric.

- On average, those who *passed* Pre-AA Reading earned almost four times as many units as those who *never passed* (25.19 versus 6.38).
- More importantly, those who passed earned three and a half times as many AA & Transfer Level units (19.82 versus 5.71).

**Table 6**  
**Units\* Earned During 4-Year Study Period**  
**By Cohort Members Who...**  
***Passed Versus Didn't Pass Pre-AA Reading***

	Passed A,B,C,CR	Never Passed	Total
<b>#Students:</b>	<b>1,392</b>	<b>788</b>	<b>2,180</b>
Basic Skills Units	5.36	0.66	3.66
AA Level Units	3.19	0.69	2.29
Transfer Level Units	16.63	5.02	12.43
Total:	25.19	6.38	18.39

\* Average success units across all disciplines

**Closing Remarks:** The caveat prominently displayed on page #1 clearly states that “There is no intention here to draw conclusions regarding cause and effect”. It is indeed tempting, though. Wouldn’t you agree?

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**More information?** Please contact the Office of Institutional Research and Planning if you have any questions about this or other research and planning issues (Ext. 2360)