

## Research In Brief

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

### Pre-AA ESL Tracking Study

**Introduction:** The current study was done as part of a Spring 2007 research initiative focused on students who enter into Palomar's ESL, English, Reading 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 ESL 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 an ESL 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 ESL enrollment term, the lowest catalog number was used for classification purposes. Students whose first ESL course was taken prior to Summer'95 were eliminated from the study to optimize correct identification of "first" ESL enrollments at Palomar. Sacrificing the Summer'88 through Spring'95 data ensured that the identified course was the first ESL course taken in at least seven years.

For the 24 terms beginning Summer'95 and ending Spring'03, a total of 1,990 students were identified whose first ESL 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 ESL Pre-AA entry cohorts were collapsed together for the purposes of the analyses that follow.

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

|         | Summer | Fall | Spring | Total |
|---------|--------|------|--------|-------|
| 2002-03 | 49     | 119  | 130    | 298   |
| 2001-02 | 22     | 121  | 113    | 256   |
| 2000-01 | 46     | 94   | 93     | 233   |
| 1999-00 | 52     | 106  | 91     | 249   |
| 1998-99 | 28     | 157  | 122    | 307   |
| 1997-98 | 26     | 113  | 96     | 235   |
| 1996-97 | 17     | 101  | 97     | 215   |
| 1995-96 | 13     | 102  | 82     | 197   |
| Total:  | 253    | 913  | 824    | 1,990 |

**Demographics:** In order to put demographics of the ESL Pre-AA students in perspective, Table 2 contrasts them against the demographics of students who entered the ESL 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 ESL 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>1,990</b> | <b>219</b> | <b>1,201</b>   |
| <b>Gender</b>                       |              |            |                |
| Female                              | 59%          | 60%        | 63%            |
| Male                                | 41%          | 40%        | 37%            |
| <b>Ethnicity</b>                    |              |            |                |
| Asian/PI                            | 25%          | 27%        | 57%            |
| Black                               | 0%           | 0%         | 1%             |
| Filipino                            | 1%           | 1%         | 1%             |
| Hispanic                            | 65%          | 64%        | 25%            |
| Nat.Am.                             | 0%           | 0%         | 0%             |
| White                               | 5%           | 5%         | 9%             |
| Unknown                             | 4%           | 2%         | 8%             |
| <b>Age</b>                          |              |            |                |
| 17 & Under                          | 15%          | 4%         | 3%             |
| 18-20                               | 18%          | 18%        | 43%            |
| 21-24                               | 16%          | 14%        | 26%            |
| 25-29                               | 15%          | 20%        | 13%            |
| 30-34                               | 14%          | 15%        | 7%             |
| 35 & Over                           | 22%          | 30%        | 8%             |
| <b>Full-Time First Semester</b>     |              |            |                |
| Yes                                 | 14%          | 13%        | 73%            |
| No                                  | 86%          | 87%        | 27%            |
| <b>Citizenship</b>                  |              |            |                |
| Yes                                 | 22%          | 23%        | 13%            |
| No                                  | 78%          | 77%        | 87%            |
| <b>Had Financial Aid First Year</b> |              |            |                |
| Yes                                 | 10%          | 8%         | 12%            |
| No                                  | 90%          | 92%        | 88%            |
| <b>EOPS First Semester</b>          |              |            |                |
| Yes                                 | 3%           | 0%         | 5%             |
| No                                  | 97%          | 100%       | 95%            |

- Gender: Pre-AA ESL students are disproportionately more female than male (59%/41%) and that gap widens at Transfer Level (63%/37%)
- Ethnicity: Pre-AA cohorts are 65% Hispanic and 25% Asian/Pacific Islander with their representation reversed at Transfer Level (57% Asian/PacIsl and 25% Hispanic)

- Age: Pre-AA students are evenly distributed across age groups while almost three quarters (72%) of Transfer Level students are under 25
- Full-Time/Part-Time Status: About nine of every ten (86%) students who entered ESL at Pre-AA Level were part-time in their first semester -- 59 percentage points more than those who entered at Transfer Level
- Financial Aid/EOPS Status: While only 22% were U.S.citizens, one in ten (10%) Pre-AA ESL students had financial aid during their first academic year and 3% were in EOPS their first ESL term

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

|                          | Number of Cohort Members = 1,990 |              |
|--------------------------|----------------------------------|--------------|
|                          | Passed A,B,C,CR                  | Never Passed |
| <b>ESL</b>               |                                  |              |
| #Students                | 1,505                            | 485          |
| %Students                | 76%                              | 24%          |
| Avg Enrolls              | 1.98                             | 1.16         |
| Success Rate             | 86%                              |              |
| Retention Rate           | 97%                              | 70%          |
| Avg Success Units        | 4.22                             |              |
| Avg Terms to 1st Success | 1.17                             |              |

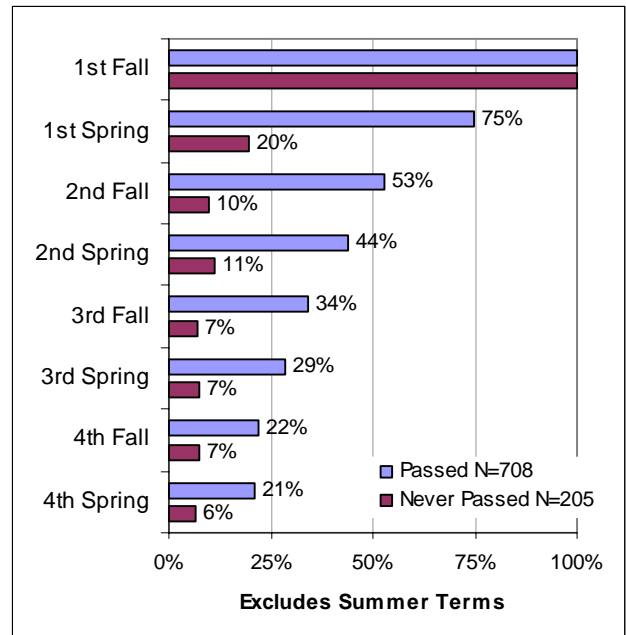
- Three quarters (76%) of ESL Pre-AA students passed one or more Pre-AA ESL courses during the 4 years they were tracked.
- However, the remaining 24% never passed Pre-AA ESL during that 4-year period of time.

- Those who passed averaged about eight tenths of an enrollment more than those who never passed (1.98 versus 1.16).
- Those who passed exhibited an 86% success rate in the Pre-AA ESL courses they took.
- Retention in Pre-AA ESL was 27 percentage points higher among those who passed (97% versus 70%).
- Those who passed earned an average of 4.22 success units in Pre-AA ESL.
- On average, those who passed took slightly over one term (1.17) to achieve their first success in Pre-AA ESL.

- On Average, it took those students 3.1 terms (slightly over a year) to pass their first AA Level ESL course.
- Three in ten (30%) passed a Transfer Level ESL course.
- On Average, it took those students 3.02 terms (slightly over a year) to pass their first Transfer Level ESL course.

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

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



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

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

| Number of Cohort Members = 1,990 | Passed                       | Never  | Didn't |
|----------------------------------|------------------------------|--------|--------|
|                                  | A,B,C,CR                     | Passed | Take   |
| <b>ESL</b>                       | <b>AA Level (50-99)</b>      |        |        |
| #Students                        | 185                          | 47     | 1,758  |
| %Students                        | 9%                           | 2%     | 88%    |
| Avg Enrolls                      | 1.74                         | 1.09   |        |
| Success Rate                     | 93%                          |        |        |
| Retention Rate                   | 98%                          | 75%    |        |
| Avg Success Units                | 4.20                         |        |        |
| Avg Terms to 1st Success         | 3.10                         |        |        |
| <b>ESL</b>                       | <b>Transfer Level (100+)</b> |        |        |
| #Students                        | 602                          | 106    | 1,282  |
| %Students                        | 30%                          | 5%     | 64%    |
| Avg Enrolls                      | 2.53                         | 1.24   |        |
| Success Rate                     | 87%                          |        |        |
| Retention Rate                   | 98%                          | 82%    |        |
| Avg Success Units                | 10.22                        |        |        |
| Avg Terms to 1st Success         | 3.02                         |        |        |

- One of every eleven (9%) passed an AA Level ESL course. (Curriculum at AA Level is limited to a 3-course vocational sequence and a “topics” course.)

- Students who passed a Pre-AA ESL course exhibited considerably more persistence than their counterparts who never passed such a course.
- By the fourth Spring since their initial entry, one in five (21%) of the students who passed were still enrolling in Palomar courses versus less than a third as many (6%) of those who never passed.

Table 5

## 4-Year (12 Term) Progress of ESL Pre-AA Entry Cohorts in Other Subjects

| Number of Cohort Members = 1,990 | 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                        | 65                  | 29           | 1,896       | 66               | 32           | 1,892       | 202                   | 25           | 1,763       |
| %Students                        | 3%                  | 1%           | 95%         | 3%               | 2%           | 95%         | 10%                   | 1%           | 89%         |
| Avg Enrolls                      | 1.12                | 1.31         |             | 1.24             | 1.25         |             | 1.29                  | 1.28         |             |
| Success Rate                     | 90%                 |              |             | 80%              |              |             | 91%                   |              |             |
| Retention Rate                   | 99%                 | 82%          |             | 98%              | 80%          |             | 98%                   | 84%          |             |
| Avg Success Units                | 4.06                |              |             | 4.00             |              |             | 4.68                  |              |             |
| Avg Terms to 1st Success         | 6.34                |              |             | 7.71             |              |             | 7.44                  |              |             |
| <b>READ</b>                      |                     |              |             |                  |              |             |                       |              |             |
| #Students                        | 154                 | 33           | 1,803       | 66               | 13           | 1,911       | 34                    | 8            | 1,948       |
| %Students                        | 8%                  | 2%           | 91%         | 3%               | 1%           | 96%         | 2%                    | 0%           | 98%         |
| Avg Enrolls                      | 1.60                | 1.03         |             | 1.06             | 1.08         |             | 1.12                  | 1.00         |             |
| Success Rate                     | 94%                 |              |             | 99%              |              |             | 97%                   |              |             |
| Retention Rate                   | 98%                 | 82%          |             | 100%             | 86%          |             | 100%                  | 38%          |             |
| Avg Success Units                | 2.54                |              |             | 4.18             |              |             | 3.06                  |              |             |
| Avg Terms to 1st Success         | 3.39                |              |             | 5.18             |              |             | 6.21                  |              |             |
| <b>MATH</b>                      |                     |              |             |                  |              |             |                       |              |             |
| #Students                        | 192                 | 87           | 1,711       | 289              | 49           | 1,652       | 160                   | 26           | 1,804       |
| %Students                        | 10%                 | 4%           | 86%         | 15%              | 2%           | 83%         | 8%                    | 1%           | 91%         |
| Avg Enrolls                      | 1.36                | 1.54         |             | 1.83             | 1.61         |             | 2.58                  | 1.65         |             |
| Success Rate                     | 85%                 |              |             | 79%              |              |             | 78%                   |              |             |
| Retention Rate                   | 98%                 | 81%          |             | 96%              | 72%          |             | 95%                   | 77%          |             |
| Avg Success Units                | 3.28                |              |             | 5.84             |              |             | 7.75                  |              |             |
| Avg Terms to 1st Success         | 3.65                |              |             | 4.18             |              |             | 5.51                  |              |             |
| <b>Other Subjects</b>            |                     |              |             |                  |              |             |                       |              |             |
| #Students                        | 44                  | 9            | 1,937       | 161              | 25           | 1,804       | 827                   | 171          | 992         |
| %Students                        | 2%                  | 0%           | 97%         | 8%               | 1%           | 91%         | 42%                   | 9%           | 50%         |
| Avg Enrolls                      | 1.39                | 1.00         |             | 1.97             | 1.28         |             | 9.39                  | 1.55         |             |
| Success Rate                     | 92%                 |              |             | 90%              |              |             | 81%                   |              |             |
| Retention Rate                   | 95%                 | 89%          |             | 98%              | 88%          |             | 95%                   | 78%          |             |
| Avg Success Units                | 2.36                |              |             | 3.60             |              |             | 20.12                 |              |             |
| Avg Terms to 1st Success         | 5.34                |              |             | 3.67             |              |             | 2.92                  |              |             |

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

- Generally, ESL Pre-AA students did not enroll in (95% *Didn't Take*) Pre-AA English or AA Level English though, notably, one in ten (10%) passed Transfer Level English.
- Likewise, ESL students tended not to take Reading courses -- other than Pre-AA Reading which 8% passed.

- Pre-AA Math was taken by 14%, AA Level Math by 17% and Transfer Level by 9% -- the percentages who passed were 10%, 15% and 8%, respectively.
- Half (50% i.e. 100% minus the 50% who *Didn't Take*) enrolled in “Other” Transfer Level courses.
- Those who were successful in Other Transfer Level courses earned, on average, 20.12 units.

**Overall 4-Year Progress:** As was reported earlier (Table 3), not all ESL Pre-AA students actually passed a Pre-AA ESL course – 76% did and 24% 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 ESL 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 ESL earned nine times as many units as those who *never passed* (23.37 versus 2.56).
- More importantly, those who passed earned seven and a half times as many AA & Transfer Level units (18.27 versus 2.42).

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

|                      | Passed<br>A,B,C,CR | Never<br>Passed | Total        |
|----------------------|--------------------|-----------------|--------------|
| <b>#Students:</b>    | <b>1,505</b>       | <b>485</b>      | <b>1,990</b> |
| Basic Skills Units   | 5.10               | 0.14            | 3.89         |
| AA Level Units       | 2.30               | 0.26            | 1.80         |
| Transfer Level Units | 15.97              | 2.16            | 12.61        |
| Total:               | 23.37              | 2.56            | 18.30        |

\* 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)