

## Research In Brief

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

### Athlete Academic Performance Tracking: July 2010

**ABSTRACT:** A sample of 645 Athletes and a matched sample of 645 Control students were tracked for 12 terms (4 years). By the end of the 4<sup>th</sup> year, the Athletes were 17% more likely to have transferred to a 4-year institution and 13% less likely to have left Palomar without either having first transferred to a 4-year institution or having first earned an AA/AS.

**Introduction:** The Athletics Department (ACS) submitted a request to the Research & Planning Office for a study of the *Academic Performance of Student Athletes*. The desired research was to track recent athletic participants over a period of time to ascertain their level of attainment on key Academic Performance indicators:

- persistence from one term to the next;
- units earned;
- GPA;
- AA/AS degree completion;
- transfer certifications (IGETC, CSU GE);
- transfer to 4-year institutions.

Objectives of the research included:

- obtaining comparisons of the performance exhibited by athletes versus that of the general student body;
- driving those comparisons down to specific sports/teams;
- further drilling down to the gender of specific sport/team participants.

**Background Research:** Research “homework” conducted as part of this study revealed that while almost three quarters (72%) of Palomar athletes participated in ACS during their first-time freshman year, almost one of every five (18%) delayed participating until their second year. The balance (10%) delayed until their third year or beyond.

Given that athletes may have been at Palomar for several terms before participating in their first sport, it did not seem appropriate to compare

them to first-time freshmen who entered Palomar during the term that ACS students took their first sport. Therefore, the methodology described in the next section was employed to ensure a level playing field (pardon the sports analogy) between the ACS students and the comparison group.

**Methodology:** The analysis was limited to ACS students from PeopleSoft's "Athlete Academic Progress Table" who started as first-time freshmen between Summer'02 and Spring'06 -- a period that spans four full academic years (2002-03 to 2005-06). It should be noted that transfer students did not begin at Palomar as first-time freshmen and are therefore excluded from analysis.

For the purpose of obtaining comparisons of athlete performance versus that of the general student body, each individual athlete was "paired" with a quasi randomly selected student who shared ALL of the following seven characteristics of the athlete with whom she/he was paired:

- 1) **Year & Term** entered Palomar as a first-time freshman;
- 2) **English Placement** Level (Transfer Lvl, AA Lvl, Basic Skills Lvl or None<sup>1</sup>);

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<sup>1</sup> A placement of "None" indicates the student had no placement. This occurs in special situations, such as for: advanced placement students, those who passed AA and/or Transfer level while still in K12 and those "Exempt" from Matriculation.

- 3) **Mathematics Placement Level** (Transfer Lvl, AA Lvl, Basic Skills Lvl or None);
- 4) **Age** (in years) on Census Day of first-time freshman term;
- 5) **Gender**;
- 6) **Full-time/Part-time Load** during first-time freshman term;
- 7) **Took Only AP/ROP<sup>2</sup>** during first-time freshman term.

A total of 645 ACS first-time freshmen were successfully paired with a member of the general population of first-time freshmen who "looked like" them on all seven of the above characteristics.

Both the 645 ACS students and the 645 Control students were then tracked for four years (12 terms) from entry as freshmen to determine their:

- 1) Persistence From Term to Term;
- 2) Transfer Level Academic Progress (units earned & GPA);
- 3) Degree Applicable Academic Progress ("degree applicable" includes BOTH Transfer & AA/AS level course work);
- 4) End of Year Status their fourth year -- mutually exclusive status groups...
  - o Transferred;
  - o Earned AA/AS without transfer;
  - o Still at Palomar;
  - o Stopped Attending Palomar (w/out EITHER having first transferred to a 4-Yr OR having earned an AA/AS).

**Demographics:** As summarized in Table 1, the demographics upon which each ACS student was matched to a general population (Control) student match "exactly" between the two groups.

**Table 1**  
**Demographics upon which ACS students were matched to Controls**

	ACS	Control
<b># in Cohort</b>	645	645
<b>Palomar Entry Year</b>		
2005-06	27.3%	27.3%
2004-05	24.0%	24.0%
2003-04	25.7%	25.7%
2002-03	22.9%	22.9%

<sup>2</sup> This restriction ensures that athletes are not paired with members of the AP/ROP-ONLY population, unless the athlete was one during her/his first-time freshman term.

**Table 1 (Continued)**  
**Demographics upon which ACS students were matched to Controls**

	ACS	Control
<b># in Cohort</b>	645	645
<b>Palomar Entry Term</b>		
Summer	45.3%	45.3%
Fall	47.3%	47.3%
Spring	7.4%	7.4%
<b>English Placement Level</b>		
Transfer Lvl	19.4%	19.4%
AA Level	22.0%	22.0%
BSkill Lvl	31.6%	31.6%
None	27.0%	27.0%
<b>Math Placement Level</b>		
Transfer Lvl	16.1%	16.1%
AA Level	34.6%	34.6%
BSkill Lvl	26.0%	26.0%
None	23.3%	23.3%
<b>Age at 1st Term Census</b>		
17 & Under	22.5%	22.5%
18-20	74.4%	74.4%
21-24	2.8%	2.8%
25+	0.3%	0.3%
Avg Age	18.1	18.1
<b>Gender</b>		
Female	26.2%	26.2%
Male	73.6%	73.6%
Unknown	0.2%	0.2%
<b>FT/PT Status 1st Term</b>		
Full-Time	40.6%	40.6%
Part-Time	59.4%	59.4%
<b>Took Only AP/ROP 1st Term</b>		
No	99.7%	99.7%
Yes	0.3%	0.3%

All other demographics were left free to vary randomly between ACS and Control students. One such demographic was "ethnicity". Table 2 shows the ethnic composition of the two groups.

**Table 2**  
**Ethnicity of ACS versus Control Stdnts**

	ACS	Control
<b># in Cohort</b>	645	645
<b>Ethnicity</b>		
African Am.	14.3%	2.5%
Asian	1.9%	4.8%
Filipino	2.8%	5.0%
Hispanic	20.0%	26.5%
Native Am.	1.2%	1.1%
Pacific Isl.	4.0%	1.2%
White	49.6%	54.0%
Unknown	4.8%	4.5%
MultiEthnic	1.4%	0.5%

*Table 2 Take Aways:* ACS students were...

- 11.8% MORE likely to be African American;
- 2.9% LESS likely to be Asian;
- 2.2% LESS likely to be Filipino;
- 6.5% LESS likely to be Hispanic;
- 0.1% MORE likely to be Native American;
- 2.8% MORE likely to be Pacific Islander;
- 4.4% LESS likely to be White;
- 0.3% MORE likely to be of Unknown ethnicity;
- 0.9% MORE likely to be of Two or More ethnicities.

**Persistence From Term1 Through Term12 (a 4-year period):** In order to be included in the analysis, a student must have received at least one grade of A, B, C, CR/P, D, F, FW, NC/NP or W during the term she/he entered Palomar as a first-time freshman (i.e. Term1). A student is considered to have "persisted" to a subsequent term if she/he received yet another such grade during that subsequent term. See Table 3.

**Table 3**  
**Persistence of ACS versus Controls**

		ACS	Control
<b># in Cohort</b>		645	645
<b>Persisted to:</b>			
Year1	Term1	100%	100%
	Term2	88%	69%
	Term3	68%	39%
Year2	Term4	69%	44%
	Term5	68%	47%
	Term6	50%	30%
Year3	Term7	40%	31%
	Term8	38%	33%
	Term9	29%	21%
Year4	Term10	21%	20%
	Term11	20%	23%
	Term12	15%	13%

*Table 3 Take Away:* ACS students were...

- More likely to persist from one term to the next.

**Transfer Level Progress By Year4:**

Table 4 shows the progress that the students had made in their transfer level coursework by the end of their fourth year.

*Table 4 Take Aways:* ACS students were...

- More likely to pass transfer level English and transfer level Mathematics;
- More likely to become IGETC and CSU GE certified;

- More likely to have earned any given level of transferable units (30, 40, 50 or 60);
- More likely to have earned any given level of transfer GPA (2.0, 2.5, 3.0) – with the 3.5 GPA level as the **only** exception.

**Table 4**  
**Transfer Level Progress By Year4**

	ACS	Control
<b># in Cohort</b>	645	645
<b>Passed Transfer English and/or Math</b>		
Passed ENG	51%	35%
Passed MATH	28%	23%
Passed Both	23%	19%
<b>IGETC &amp; General Ed Certifications</b>		
UC IGETC	3%	3%
CSU IGETC	3%	1%
CSU GE	12%	4%
Any of the 3	15%	7%
<b>Transfer Units Earned</b>		
60 or More	39%	22%
50 or More	51%	27%
40 or More	59%	31%
30 or More	70%	39%
<b>Transfer Grade Point Average</b>		
3.5 or Higher	5%	9%
3.0 or Higher	24%	23%
2.5 or Higher	49%	38%
2.0 or Higher	73%	55%

**Degree Applicable Progress By Year4:** *Degree Applicable* coursework encompasses both the Transfer level and the AA level coursework that students completed. *Associate in Arts Degrees* are awarded based on combinations of units earned at these two course levels. See Table5.

**Table 5**  
**Degree Applicable Progress By Year4**

	ACS	Control
<b># in Cohort</b>	645	645
<b>Degree Applicable Units Earned</b>		
60 or More	46%	26%
50 or More	55%	30%
40 or More	64%	34%
30 or More	74%	43%
<b>Degree Applicable Grade Point Average</b>		
3.5 or Higher	5%	8%
3.0 or Higher	22%	21%
2.5 or Higher	45%	37%
2.0 or Higher	71%	55%

Table 5 Take Aways: ACS students were...

- More likely to have earned any given level of degree applicable units (30, 40, 50 or 60);
- More likely to have earned any given level of degree applicable GPA (2.0, 2.5, 3.0) – with the 3.5 GPA level as the **only** exception.

**Status At End Of Year4:** Each student was classified into one of four mutually exclusive end-of-year status groups:

- Transferred;
- Earned AA/AS without transfer;
- Still at Palomar;
- Stopped Attending Palomar (without EITHER having **first** transferred to a 4-Yr OR having earned an AA/AS).

Table 6 summarizes where the two groups stood at the end of their fourth year.

**Table 6**  
**Status At End Of Year4**

	ACS	Control
<b># in Cohort</b>	645	645
<b>End of Year Status</b>		
• Transferred	<b>43%</b>	<b>26%</b>
w AA/AS	17%	5%
w/out AA/AS	27%	21%
• AA/AS Only	<b>4%</b>	<b>3%</b>
Palomar AA/AS	4%	3%
Other AA/AS	-	1%
• Still at Palomar	<b>15%</b>	<b>20%</b>
• Not Here 2+ Terms	<b>38%</b>	<b>51%</b>

Table 6 Take Aways: ACS students were...

- More likely to transfer to a 4-year;
- Less likely to have stopped attending Palomar without **first** either having transferred to a 4-Yr or having earned an AA/AS.

**Summary Of The Findings:**

ACS students were:

- More likely to persist from one term to the next;
- More likely to pass transfer level English and transfer level Mathematics;
- More likely to become IGETC and CSU GE certified;
- More likely to have earned any given level of both transferable and degree applicable units (30, 40, 50 or 60);
- More likely to have earned any given level of both transferable and degree applicable GPA (2.0, 2.5, 3.0) – with the 3.5 GPA level as the **ONLY** exception;
- More likely to transfer to a 4-year;
- Less likely to have stopped attending Palomar without **first** either having transferred to a 4-Yr or having earned an AA/AS.

I believe the reader will agree that if the only findings reported for this study were those in Table 6, they alone come pretty close to telling the “whole” story. *Athletes are more likely to transfer to a 4-year school and less likely to stop attending Palomar without either a diploma or a transfer acceptance in hand.*

That said, this report ends with a summary of the Table 6 data from this report plus: (1) one for Female Athletes Only, (2) Male Athletes Only and (3) 17 specific gender/sport combinations. Analysis and interpretation of the following data are left to the reader.

**For Summary of Table 6 Data See Next Page**

### Status At End Of Year4

	# In Cohort	Transfer to 4-yr		AA/AS Only		Still at Palomar		Not Here 2+ Terms	
		%Above +	Below -	%Above +	Below -	%Above +	Below -	%Above +	Below -
		Control	Actual %'s	Control	Actual %'s	Control	Actual %'s	Control	Actual %'s
<b>All Sports &amp; All Genders</b>	645	17%	(43% vs 26%)	1%	(4% vs 3%)	-5%	(15% vs 20%)	-13%	(38% vs 51%)
<b>Women ONLY</b>									
All Sports (N=169)	169	17%	(47% vs 30%)	-1%	(4% vs 5%)	-6%	(15% vs 21%)	-10%	(34% vs 44%)
Basketball (N=26)	26	7%	(42% vs 35%)	4%	(12% vs 8%)	-3%	(12% vs 15%)	-7%	(35% vs 42%)
Soccer (N=32)	32	22%	(56% vs 34%)	-6%	(0% vs 6%)	3%	(19% vs 16%)	-19%	(25% vs 44%)
Softball (N=31)	31	23%	(55% vs 32%)	-3%	(3% vs 6%)	-3%	(16% vs 19%)	-16%	(26% vs 42%)
Swimming & Diving (N=18)	18	28%	(50% vs 22%)	-6%	(0% vs 6%)	0%	(17% vs 17%)	-23%	(33% vs 56%)
Volleyball (N=22)	22	0%	(45% vs 45%)	5%	(5% vs 0%)	0%	(14% vs 14%)	-5%	(36% vs 41%)
Water Polo (N=22)	22	14%	(41% vs 27%)	0%	(5% vs 5%)	-14%	(18% vs 32%)	0%	(36% vs 36%)
<b>Men ONLY</b>									
All Sports (N=475)	475	18%	(42% vs 24%)	1%	(4% vs 3%)	-4%	(15% vs 19%)	-14%	(40% vs 54%)
Baseball (N=58)	58	39%	(67% vs 28%)	3%	(5% vs 2%)	-12%	(7% vs 19%)	-31%	(21% vs 52%)
Basketball (N=30)	30	13%	(30% vs 17%)	3%	(3% vs 0%)	-4%	(23% vs 27%)	-14%	(43% vs 57%)
Cross Country (N=16)	16	-6%	(25% vs 31%)	0%	(0% vs 0%)	19%	(19% vs 0%)	-13%	(56% vs 69%)
Football (N=158)	158	24%	(49% vs 25%)	1%	(3% vs 2%)	-5%	(11% vs 16%)	-19%	(37% vs 56%)
Golf (N=11)	11	18%	(45% vs 27%)	0%	(0% vs 0%)	-27%	(18% vs 45%)	9%	(36% vs 27%)
Soccer (N=50)	50	14%	(34% vs 20%)	0%	(4% vs 4%)	-2%	(14% vs 16%)	-12%	(48% vs 60%)
Swimming & Diving (N=22)	22	27%	(50% vs 23%)	-9%	(0% vs 9%)	27%	(41% vs 14%)	-46%	(9% vs 55%)
Tennis (N=11)	11	9%	(45% vs 36%)	9%	(9% vs 0%)	18%	(36% vs 18%)	-36%	(9% vs 45%)
Volleyball (N=21)	21	0%	(24% vs 24%)	14%	(14% vs 0%)	-14%	(19% vs 33%)	0%	(43% vs 43%)
Water Polo (N=30)	30	10%	(40% vs 30%)	-7%	(0% vs 7%)	23%	(33% vs 10%)	-26%	(27% vs 53%)
Wrestling (N=37)	37	6%	(30% vs 24%)	5%	(5% vs 0%)	-19%	(5% vs 24%)	8%	(59% vs 51%)

Cautionary Note: While it is desirable to have samples of at least 50 students to ensure that the data are statistically stable and replicable, groups as small as ten (10) are reported upon since sample sizes can become quite small when reporting upon individual genders within a specific sport.

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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).