



# RESEARCH BRIEF

## Seaver 2010-11 Retention Shows Significant Improvement

### Key Findings

Seaver retained 93% of its first year Fall 2010 entering class, the highest first year retention rate to date.

Higher retention rates mean significant cost-savings for Pepperdine, improvement in student success, and attainment of the University Mission.

The literature points to factors such as student quality and the development of a “sense of belonging” as key factors behind student retention. In the case of Seaver College, we know of at least two factors that may have impacted the higher retention rates in 2011: (1) student quality and fit; and (2) proactive advising strategies that included administrative follow-up of unregistered students during the registration period.

### Introduction

In fall 2011, Seaver retained 93% of its first year fall 2010 entering class. This was the highest first year retention rate to date for the college.

Seaver’s first-year retention rates (the % of first-time first-year students who are retained the following fall) have typically hovered around 89% for the past 10 years. This is considered to be a high retention rate when compared to most private and public institutions. Data supports these observations, with the 2010 Digest of Education Statistics reporting retention rates of 87-88% for not-for-profit private institutions within a similar range of acceptance rates as Pepperdine (see table 342 from the same digest).

The recent 93% retention rate is noteworthy because student success results in positive outcomes for students as well as the institution. Higher retention rates results in significant cost-savings for Pepperdine University as well as improved student success, and attainment of the University Mission. It is in the best interest of the University and its students to know the factors behind the improvement, and to support and maintain the higher retention rate.

### Higher retention rate means less cost to Pepperdine

Improving retention rates is important for all institutions of higher education including schools such as Pepperdine that pride itself in being selective and having high student success rates. The cost of losing students goes beyond monetary matters for the institution. Attrition impacts the student, the students’ family, the federal government and society at large.

From 2004 to 2009, Seaver lost approximately 11% of its first year students between the first and second years. The cost of attrition for Seaver’s entering cohort of 2008 who did not begin a second year in 2009 is estimated to be at \$2.7 million (table 1). This estimate is conservative because it does not account for financial assistance that non-returning students could be receiving.

Since attrition rates double by the time the entering cohort reaches the 6-year graduation, the cost of attrition for the entering class of 2008 may reach \$5.4m by 2014.

Fall 2011’s higher retention rate at 93%

**Table 1. Cost of attrition for first-time full-time Seaver students who did not begin a second year**

Measure	2005	2006	2007	2008	2009
First-year undergraduate students (first-time, full-time, from cohort of previous year)	723	759	703	751	782
X Attrition Rate	10.0%	11.0%	11.8%	11.6%	9.9%
X Education and related cost per student (FTE)	\$29,453	\$31,129	\$34,487	\$35,061	\$35,238
Cost of attrition	\$2.1m	\$2.6m	\$2.9m	\$3.1m	\$2.7m

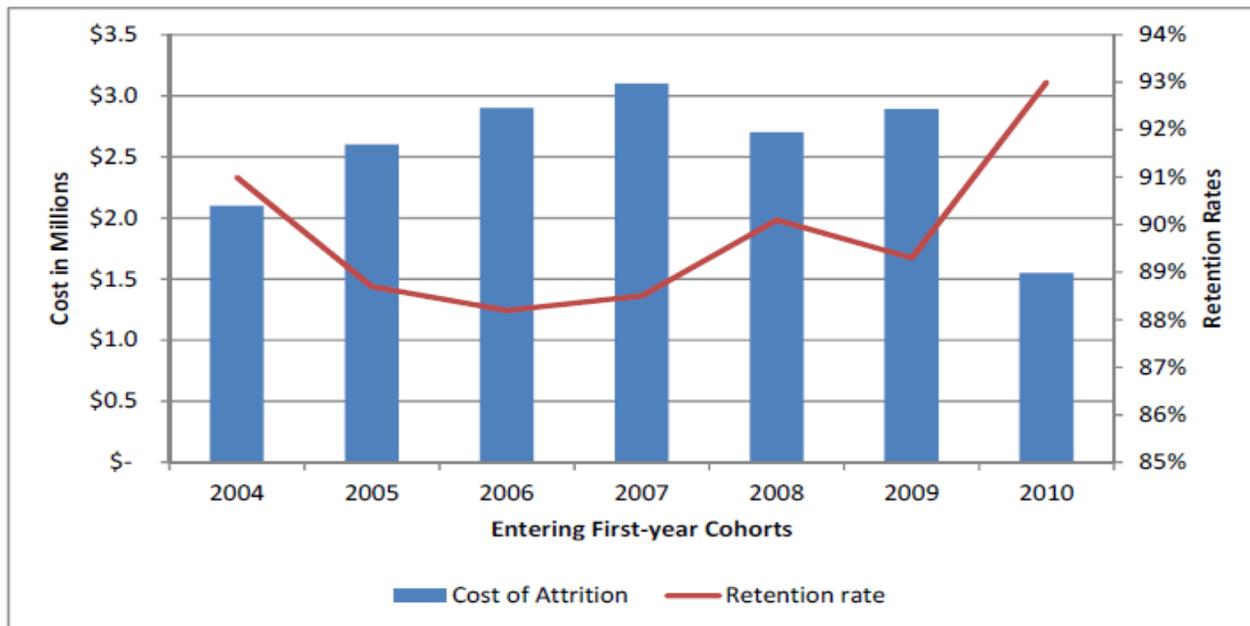
Notes: Education and related cost per student includes: instruction, student services, academic support, operations and maintenance, and institutional support. All US dollar amounts are in current dollar terms. Sources of basic data: Delta Cost Project IPEDS Database, 1987-2009 generated by TCS Online; Common Dataset. Data compiled by CollegeMeasures.org

means attrition costs for Pepperdine will be much lower. The increase in first year retention is good news for all involved. Using the education and related cost per student from 2009 (table 1), the institution incurred a much lower attrition cost at approximately \$1.6m in 2010 (figure 1).

**Factors behind high retention rates**

The new retention rate of 93% is impressive given the historical performance of Pepperdine (figure 2) over the past 20 years. Retention increases for Seaver were shared by all groups crossing both gender and ethnicity (table

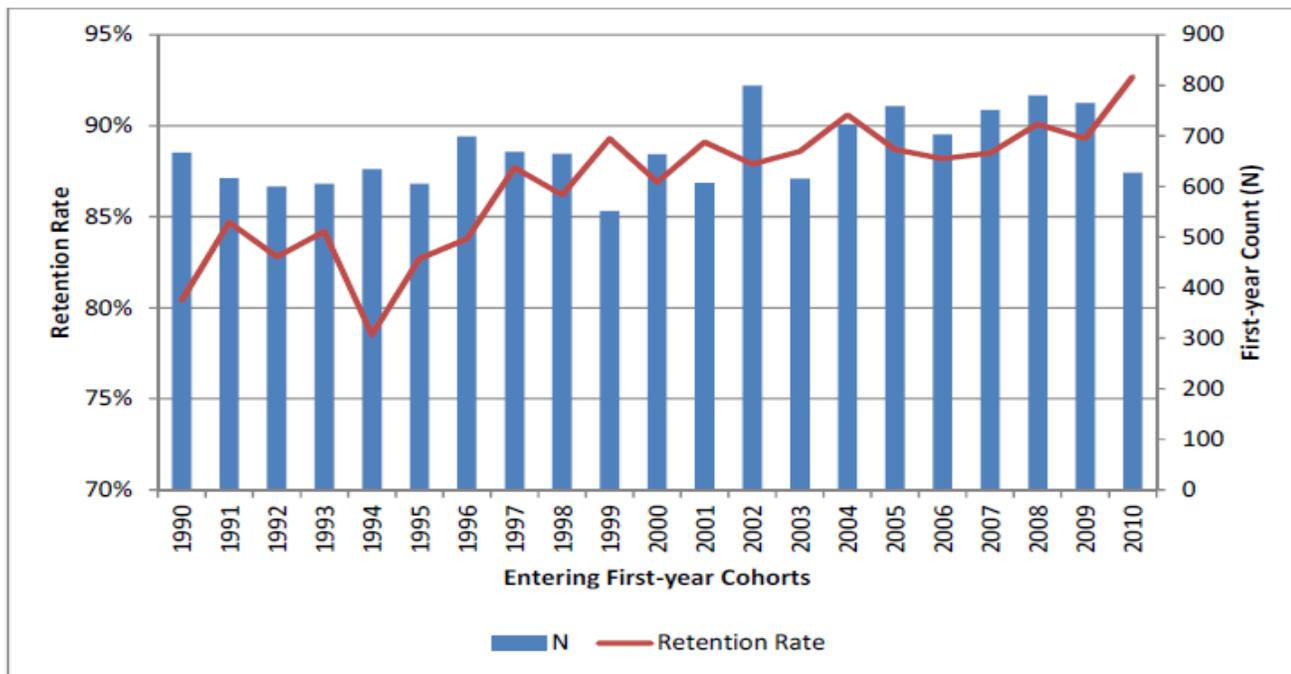
**Figure 1. Higher retention rates means less cost of attrition**



Note: 2009 and 2010 costs of attrition are estimated using the 2009 education and related cost per student (FTE).

Source: Office of Institutional Research and Delta Cost Project IPEDS Database, 1987-2009 generated by TCS Online; Common Dataset. Data compiled by CollegeMeasures.org

**Figure 2. Seaver freshman retention rates**



Source: Office of Institutional Research

2). It is worth taking a closer look into the potential factors that have led to such improvement. Knowing the “why” behind the improvement in retention will help Pepperdine continue on its path of success for its students.

College retention has been well-researched over the years. Research has shown that high school academic achievement, socioeconomic status, gender, commitment to earning a degree, and social and academic involvement all influence degree completion (Astin 1993; Cabrera and Nora 1996; Tinto 1993). Specifically, students who are socially disadvantaged, academically less prepared, and who experience a lack of resources and support from significant others, are more likely to drop out of college (Astin 1993; Braxton 2000; Seidman 2005). Students who feel isolated or lack a sense-of-belonging during their early years of college are also more likely to leave (Hurtado and Carter 1997; Hausmann et al. 2007). Hurtado and Carter mention that a consistent finding from a variety of studies is that the “integrating experiences” of involvement, engagement, and affiliation are central to students’ development and progress in college (Astin 1984, 1993; Pace 1984; Pascarella and Terenzini 1991).

The literature points to student quality and sense of belonging at the academic and social realms as key factors behind student retention. In the case of Seaver, we know of at least two factors that led to higher retention rates in 2011: (1) student quality and fit; and (2) proactive advising

practices that included better administrative follow-up of students during the registration period.

#### *Student quality and fit*

DeAngelo, Franke, Hurtado, Pryor and Tran (2011) did a study to model and predict degree completion using data from institutions who participated in The Freshman Survey (TFS) of the UCLA Higher Education Research Institute. The model uses student characteristics and measures of institutional fit to predict graduation rates. Graduation rates and retention rates are closely correlated with one another. Higher graduation rates directly imply higher retention rates.

The primary analytic method used was logistic regression, in which the dependent variable used is dichotomous, coded as “1” for respondents who graduated in 4, 5 or 6 years, and “0” if they did not. Seaver first-time first-year students are part of the UCLA TFS database. DeAngelo et al. (2011) predicted Seaver graduation rates based on two TFS datasets on the 2004 (450 respondents out of 723 Seaver freshmen students) and 2010 (469 respondents out of 628 Seaver freshmen students) entering freshmen cohorts. The explanatory variables used were as follows, from the TFS survey:

- a) Background and academic characteristics
- b) High-school background
- c) Student background
- d) Parental background

**Table 2. Retention rates across races/ethnicities, for incoming cohorts 2004-2010**

Cohort	Non-resident Alien	Hispanic or Latino	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Two or more Races	Unknown	Total
2004	86%	96%	78%	93%	92%	N/A	89%	N/A	100%	91%
2005	82%	89%	100%	85%	97%	N/A	89%	N/A	88%	89%
2006	80%	94%	92%	90%	83%	N/A	88%	N/A	91%	88%
2007	84%	88%	91%	88%	88%	N/A	89%	N/A	87%	89%
2008	76%	90%	91%	96%	87%	100%	91%	N/A	91%	90%
2009	89%	91%	100%	92%	88%	82%	89%	N/A	89%	89%
2010	100%	90%	100%	93%	91%	100%	92%	94%	95%	93%
Baseline headcounts										
Cohort	Non-resident Alien	Hispanic or Latino	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Two or more Races	Unknown	Total
2004	43	66	9	98	62	N/A	429	N/A	16	723
2005	45	70	13	72	58	N/A	484	N/A	17	759
2006	35	68	12	51	48	N/A	466	N/A	23	703
2007	37	66	11	94	58	N/A	470	N/A	15	751
2008	46	78	11	45	52	13	501	N/A	34	780
2009	45	105	6	95	49	11	398	N/A	56	765
2010	36	91	4	80	53	3	266	52	42	627

Note: Data includes part-time students.

Source: Office of Institutional Research

- e) Student finances
- f) Activities in past year (as senior in high school)
- g) College choice
- h) Student's self-ratings
- i) Student's goals and values (including degree aspirations and choice of major)
- j) College plans (including planned place of residence in the first year)
- k) Institutional characteristics (including selectivity and institutional type)

The expected 6-year graduation rates using the DeAngelo et al. (2011) model for the 2004 cohort correctly predicted actual Seaver graduation rates to be 80%. Using the same model on the 2010 incoming cohort, Seaver 6-year graduation rates in 2016 are expected to reach 84%. This is 4 percentage points higher than the 6-year graduation rates for the 2004 cohort, due to

better student quality and fit alone. Seaver's predicted graduation rates for the 2010 cohort are also slightly higher than the 6-year graduation rates of the 2010 cohort in "highly selective" private universities, which are predicted to reach 83% in 2016.

To summarize, it appears student quality and fit has improved for Seaver, demonstrated by higher predicted graduation rates for the 2010 cohort compared to the 2004 cohort. Better student quality and fit also implies higher retention rates.

#### *Better administrative follow-up of students*

Systemic causes that hamper or act as barriers to student success could benefit from a motivating "nudge". Thaler & Sunstein (2008) show that by knowing how people think, choice environments can be designed that make it

easier for people to choose what is best for themselves, their families, and their society.

Starting in 2009, and more actively in 2010, the Student Administrative Services at Seaver College did an aggressive, personalized communication campaign to “nudge” students to register for the following spring and fall semesters. They also provided students the assistance they needed to ensure they eventually graduate on time. Seaver students were emailed about a month prior to, and during, the registration period. Students that did not register on time were also followed up with another email. Within this process, Seaver administrators regularly communicated with students via phone, email and face-to-face conversations, as well as in intimate classroom visits (to classes with less than 18 students). This personalized the registration process for all students, and exhibited an additional level of concern for those who delayed their registration. One of the issues that the process revealed was that there were a number of students who were delaying registration because they had back payments amounting to \$2,000 or less. To help out students with this amount of school debt, the registrar’s office coordinated closely with the financial aid office to come up with additional funding to bridge the gap. For those students with greater financial obligations, the registrar’s office worked with financial aid to identify other sources of funding for which the students might apply.

### Moving forward

There are many reasons for student attrition and retention in higher education. We know that best practices described in the research will improve student commitment to their education and commitment to the institution. Pepperdine University students are provided rich opportunities that are noted in the research to improve retention. Some of these include what the Association of American Colleges and Universities refer to as high impact practices that include first year seminars, learning communities, small class size, undergraduate research, study abroad and more. As we strive to maintain our current high retention rate at Seaver, we will be focusing on two aspects: learning about the students we are losing and why, and implementing best practices.

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