

Baccalaureate Student Flow by College of Enrollment
Office of Planning and Institutional Assessment
October 2005

Summary

This report tracks the status of the Fall 1998 cohort of first-time degree-seeking students through six years to determine the flow of students through colleges at Penn State. The analysis found that 44 percent of the total cohort graduated in the college in which they initially enrolled and 23 percent graduated from another college by Fall 2004. However, this pattern varied for University Park and non-University Park students. University Park students were twice as likely as non-University Park students to graduate from their initial college within six years (62 percent compared to 30 percent), although the percentages completing degrees in other colleges was the same for both groups (23 percent). Of the students in the cohort who changed their colleges, most typically did so by the third year, a pattern found for both UP and non-UP students. The College of the Liberal Arts, the College of Health and Human Development and the Smeal College of Business attracted many of the students who did change colleges and those who had started out in the Division of Undergraduate Studies.

Introduction

Many students are uncertain about their choice of majors when they first enter Penn State. A recent survey found that only 40 percent of entering students are completely certain about their choice of major.¹ Over time, this uncertainty and other factors affect a student's choice of major and ultimately, choice of college at the University. This report assesses changes in students' college enrollment from the time they first enter the University through their sixth year.

The specific cohort examined in this report included students entering Penn State in Fall 1998 as full-time, baccalaureate degree-seeking students at all campuses.² Student outcomes were assessed through six years later (near the start of the Fall 2004 semester) and included five categories:

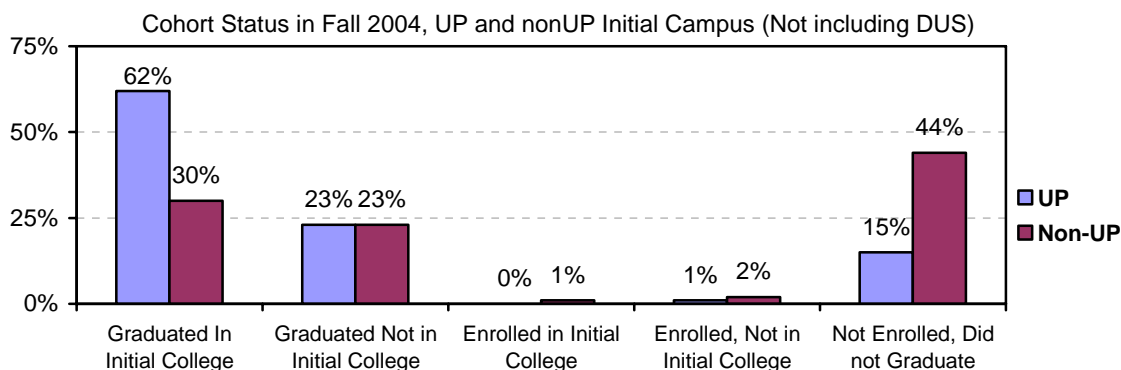
1. Completed baccalaureate degree within initial college by Fall 2004.
2. Completed baccalaureate degree in college other than initial college by Fall 2004.
3. Did not complete degree. Enrolled in undergraduate status in Fall 2004 in initial college.
4. Did not complete degree. Enrolled in undergraduate status in Fall 2004 in a different college.
5. Did not complete degree and not enrolled in undergraduate status in Fall 2004.

Findings

- Overall, about 44 percent of Penn State baccalaureate freshmen (not including DUS students) graduated in their initial college within six years and about 23 percent graduated in a different college. (Table 1) DUS students, since they must complete degrees outside of the DUS unit, are not included in these percentages, but altogether, 67 percent of DUS students completed degrees within six years of entering Penn State.
- Within six years of entering Penn State, 62 percent of the students (again, non-DUS) who started at University Park had completed a degree within their initial college and an additional 23 percent completed a degree in another college, for a total graduation rate of 85 percent. Of the non-DUS students who started at other campuses, 30 percent completed degrees in the college in which they had initially enrolled and another 23 percent completed degrees in another college, for a total graduation rate of 53 percent. (Table 2)

¹ This is from the 2005 Educational Planning Survey of 14,792 first-time undergraduate students conducted by the Division of Undergraduate Studies (DUS).

² Also included in this cohort were students who began in the Summer 1998 semester and enrolled in the fall as full-time degree-seeking students.



- Generally, students who changed their colleges did so by the third year. One year after first entering Penn State (Fall 1999), 14 percent of the total cohort had changed their choice of college. By the Fall 2000 semester, one-fourth (25 percent) of the cohort had switched to a different college, but this increased to only 26 percent by Fall 2001³. The same general pattern occurred for both University Park and non-University Park students. (Tables 1 and 2)
- Six-year outcomes differed across the starting colleges. At University Park, students in the Smeal College of Business were most likely to graduate from the college in which they initially started. Three-quarters (76 percent) of the students initially starting in the College completed degrees there and 10 percent completed degrees outside of the College. Generally at University Park, students across all colleges were more likely to complete a degree within their initial college than in any other college. For the other campuses, Behrend College had the highest proportion of its students graduate: over half (56 percent) of students who started in Behrend completed a degree within the College. (Table 3)
- At all campuses, of those students who completed a baccalaureate degree in a college other than their initial college, the College of the Liberal Arts, the College of Health and Human Development and the Smeal College of Business attracted many of these students. The Smeal College garnered the highest proportion of DUS students at both University Park and the other campuses. At University Park, one-fourth of the DUS students completed degrees in the Smeal College, while 7 percent of DUS students at other campuses completed degrees within this College. (Tables 4 and 5)
- For most colleges, the highest proportion of graduates from the Fall 1998 cohort came from within the college, that is, most of the graduates had originally started in that college. For instance, at non-University Park campuses, 173 students from the Fall 1998 cohort completed a degree in the College of Agricultural Sciences. Of this number, 77 percent had initially started out the College, about 9 percent had started out as DUS students, and the remaining 14 percent had started out in other colleges. At the non-University Park locations, the campus colleges graduated a number of students who had initially started in other colleges. (Table 6)
- For students who started at University Park, the College of Engineering had the highest proportion of internal graduates: 86 percent of the Engineering graduates from the cohort had initially been Engineering students. This means only 14 percent of the Engineering graduates from the cohort transferred into the College from another college. The Eberly College of Science (80 percent), the College of Arts and Architecture (78 percent), and the College of Agricultural Sciences (70 percent) also had relatively high proportions of graduates who had originally started in these colleges at University Park. (Table 7)

³ These proportions do not include DUS students.

Overall students in the Fall 1998 cohort were almost twice as likely to graduate from the college they started in than from another college. However, this proportion differed by location. For those students who started at University Park, almost two-thirds (62 percent) completed degrees within their initial college, while about one-third (30 percent) of the students who started at non-UP locations completed degrees within their initial college. The proportion of students completing a degree in a college other than their starting college was 23 percent at both University Park and non-University Park locations.

Identifying reasons for the differences by location in the proportions of students completing degrees within their college is beyond the scope of this analysis. Underlying factors may relate to differences in academic preparation, ability to pay tuition costs, or student intentions.

**Table 1 - Status of Fall 1998 First-time Full-time Degree-Seeking Cohort by Semester*
(N=9,675 Students)**

Semester		Graduated, In Initial College	Graduated, NOT In Initial College	Enrolled in Initial College	Enrolled, NOT in Initial College	Not Enrolled, Not Graduated
Fall 1998	All Students	--	--	100%	--	--
Fall 1999	All Students	0%	0%	72%	14%	14%
Fall 2000	All Students	0%	0%	50%	25%	25%
Fall 2001	All Students	0%	0%	46%	26%	28%
Fall 2002	All Students	25%	10%	20%	15%	31%
Fall 2003	All Students	42%	21%	2%	4%	32%
Fall 2004	All Students	44%	23%	0%	2%	31%

*Does not include DUS students

**Table 2 - Status of Fall 1998 First-time Full-time Degree-Seeking Cohort by Semester*
University Park Initial Campus (N=4,294 Students) and Non-University Park Initial Campus (N=5,381)**

Semester	Starting Campus	Graduated, In Initial College	Graduated, NOT In Initial College	Enrolled in Initial College	Enrolled, NOT in Initial College	Not Enrolled, Not Graduated
Fall 1998	UP	--	--	100%	--	--
	NonUP	--	--	100%	--	--
Fall 1999	UP	0%	0%	78%	15%	7%
	NonUP	0%	0%	67%	12%	20%
Fall 2000	UP	0%	0%	65%	24%	12%
	NonUP	0%	0%	39%	26%	34%
Fall 2001	UP	1%	0%	61%	24%	14%
	NonUP	0%	0%	33%	27%	39%
Fall 2002	UP	36%	12%	25%	12%	15%
	NonUP	15%	9%	16%	17%	43%
Fall 2003	UP	59%	21%	2%	2%	16%
	NonUP	28%	20%	3%	5%	44%
Fall 2004	UP	62%	23%	0%	1%	15%
	NonUP	30%	23%	1%	2%	44%

*Does not include DUS students

Table 3 – Fall 2004 Status by Initial College, University Park and Non-University Park

INITIAL COLLEGE	Non-UP Initial Campus Status Near Start of Fall 2004 Semester						University Park Initial Campus Status Near Start of Fall 2004 Semester					
	# of Fall 1998 Firsttime Fulltime Degree Seeking Students	% Graduated by Fall 2004 in Initial College	% Graduated by 2004 Not in Initial College	% Enrolled Fall 2004 in Initial College, Did Not Graduate	% Enrolled Fall 2004 Not in Initial College, Did Not Graduate	% Not Enrolled Fall 2004, Did not Graduate	# of Fall 1998 Firsttime Fulltime Degree Seeking Students	% Graduate d by Fall 2004 in Initial College	% Graduate d by 2004 Not in Initial College	% Enrolled Fall 2004 in Initial College, Did Not Graduate	% Enrolled Fall 2004 Not in Initial College, Did Not Graduate	% Not Enrolled Fall 2004, Did not Graduate
Abington College	70	26%	13%	6%	0%	56%						
Agricultural Sci	357	37%	21%	1%	3%	38%	151	55%	25%	0%	1%	19%
Altoona College	14	21%	29%	7%	0%	43%						
Arts and Arch	115	25%	26%	1%	2%	46%	261	61%	22%	0%	1%	16%
Behrend College	356	56%	11%	1%	1%	31%						
Berks College	24	29%	29%	0%	0%	42%						
Capital College	131	22%	18%	1%	2%	57%						
Commonwealth*	54	39%	17%	0%	0%	44%						
Communications	320	35%	22%	0%	2%	42%	286	66%	20%	0%	1%	13%
Earth and Min Sci	95	23%	31%	1%	2%	43%	110	58%	29%	0%	1%	12%
Education	598	23%	22%	0%	2%	53%	246	59%	24%	0%	0%	17%
Engineering	1,108	28%	26%	1%	3%	42%	1,018	58%	25%	1%	2%	15%
Health & Hum Dev	382	36%	19%	0%	2%	43%	301	66%	17%	0%	1%	16%
Liberal Arts	628	25%	24%	0%	2%	49%	471	64%	19%	0%	0%	16%
Science	386	17%	33%	0%	4%	45%	686	49%	37%	0%	1%	12%
Smeal Business	743	33%	24%	0%	1%	42%	764	76%	10%	0%	1%	14%
College Total	5,381	30%	23%	1%	2%	44%	4,294	62%	23%	0%	1%	15%
DUS	1,721	0%	45%	0%	4%	51%	822	0%	82%	0%	2%	16%
Total	7,102	23%	28%	0%	3%	46%	5,116	52%	32%	0%	1%	15%

*The organizational structure of the Commonwealth College remained the same throughout the time of the analysis (between Fall 1998 and Fall 2004) as restructuring occurred in July 2005.

Table 4 - Graduating College For Students Who Graduated Outside Their Initial College, Non-University Park Initial Campus

INITIAL COLLEGE	GRADUATING COLLEGE																	
	Total % Graduating In Different College	Abington College	Agricultural Sciences	Altoona College	Arts and Arch	Behrend College	Berks College	Capital College	Commonwealth College*	Communications	Earth & Mineral Sciences	Education	Engineering	Health & Hum Development	Liberal Arts	Science	Smeal Business	School of Info Science & Tech
Abington	12.9%											1.4%	1.4%		5.7%		2.9%	1.4%
Ag Sciences	21.3%	0.6%		1.4%	0.3%	0.8%	1.4%	0.3%	1.7%	1.7%	0.3%	0.3%	2.2%	4.2%	2.8%	1.7%	1.1%	0.6%
Altoona	28.6%												7.1%	7.1%			14.3%	
Arts and Arch	26.1%	2.6%				0.9%		0.9%	2.6%	2.6%		2.6%		4.4%	7.8%		0.9%	0.9%
Behrend	10.7%			0.6%				0.8%		0.8%		1.7%	0.8%	2.3%	1.7%		2.0%	
Berks	29.2%								8.3%	4.2%				4.2%	4.2%		8.3%	
Capital	18.3%	1.5%		0.8%		1.5%			2.3%	0.8%		0.8%		2.3%	6.1%		1.5%	0.8%
Commonwealth*	16.7%	1.9%				1.9%								1.9%	3.7%		7.4%	
Communications	21.9%	1.9%	0.3%	0.9%	1.3%	2.8%	0.9%	2.2%	1.6%			0.9%		3.1%	3.8%		1.9%	0.3%
Earth & Min Sci	30.5%	3.2%	1.1%		1.1%	1.1%		3.2%	1.1%	4.2%		2.1%	4.2%	5.3%	2.1%	1.1%	1.1%	
Education	21.9%	0.8%	0.3%	1.8%	0.2%	0.8%	0.2%	3.9%	3.2%	1.7%				4.2%	3.2%	0.3%	1.0%	0.3%
Engineering	25.7%	0.3%	0.8%	0.9%	0.9%	3.9%	0.7%	2.8%	1.4%	0.9%	0.6%	0.3%		0.8%	2.3%	1.0%	5.1%	3.3%
H & H D	18.9%	1.1%		1.3%	0.5%	1.6%	0.8%	0.8%	4.2%	1.3%		1.6%			3.7%		2.1%	
Liberal Arts	23.7%	2.7%		3.0%	0.5%	2.7%	0.3%	2.7%	2.1%	1.8%		1.8%		3.3%		0.8%	1.8%	0.6%
Science	33.4%	2.1%	2.1%	0.5%	1.0%	5.2%	1.8%	1.6%	1.3%	1.0%		1.8%	2.6%	3.4%	4.7%		4.2%	0.3%
Smeal Business	23.8%	3.9%	0.4%	1.2%	0.3%	2.6%	1.2%	1.2%	3.5%	2.6%		1.1%		2.2%	2.3%	0.1%		1.4%
DUS	45.0%	1.5%	0.9%	1.3%	1.2%	4.9%	0.8%	2.1%	2.5%	3.3%	0.6%	2.3%	1.9%	5.9%	6.5%	0.9%	7.3%	1.1%

*The organizational structure of the Commonwealth College remained the same throughout the time of the analysis (between Fall 1998 and Fall 2004) as restructuring occurred in July 2005.

Table 5 - Graduating College For Students Who Graduated Outside Their Initial College, University Park Initial Campus

INITIAL COLLEGE	GRADUATING COLLEGE																		
	Total % Graduating In Different College	Abington College	Agricultural Sciences	Arts and Arch	Behrend College	Berks College	Capital College	Commonwealth College*	Communications	Earth & Mineral Sciences	Education	Engineering	Health & Hum Development	Liberal Arts	Science	Smeal Business	School of Info Science & Tech	InterCollege Undergraduate**	
Ag Sciences	25.2%	0.7%		0.7%					1.3%	1.3%	2.0%	1.3%	9.3%	5.3%	0.7%	2.7%			
Arts and Arch	21.8%	0.4%	1.5%		0.4%		0.4%		4.6%		0.8%	2.7%	2.3%	5.4%	0.8%	2.7%			
Communications	20.3%			2.1%						0.7%	2.5%		2.5%	9.1%		4.2%			
Earth & Min Sci	29.1%		0.9%						4.6%		3.6%	7.3%	0.9%	5.5%		6.4%			
Education	24.0%	0.4%		0.4%				0.4%	4.1%	0.8%		0.8%	6.5%	5.7%	2.0%	2.9%			
Engineering	24.7%		0.4%	0.6%	0.2%		0.2%		2.2%	1.5%	0.9%		1.3%	3.5%	3.1%	10.7%	0.2%	0.1%	
H & H D	16.9%								1.3%		3.3%			4.7%	1.3%	6.3%			
Liberal Arts	19.3%	0.2%		0.6%	0.2%				5.3%	0.6%	3.0%	0.2%	3.0%			6.8%		0.2%	
Science	37.5%	0.2%	0.7%	1.5%	0.4%			0.2%	2.3%	0.2%	3.2%	5.5%	10.5%	8.8%		5.8%			
Smeal Business	10.0%	0.1%	0.4%	0.1%			0.4%	0.3%	1.2%	0.1%	1.3%	0.8%	1.8%	3.1%	0.4%			0.1%	
DUS	81.9%	0.1%	2.2%	2.2%	0.1%	0.1%			8.6%	2.1%	5.5%	3.4%	11.8%	16.6%	4.0%	25.1%	0.1%		

*The organizational structure of the Commonwealth College remained the same throughout the time of the analysis (between Fall 1998 and Fall 2004) as restructuring occurred in July 2005.

**Two students graduated with Bachelor of Philosophy degrees.

Table 6 – Final Graduating College and Initial College of Enrollment for Graduates From the Fall 1998 Cohort, Non-University Park Initial Campus

FINAL COLLEGE OF GRADUATION	Total # Graduates from Fall 1998 Cohort	INITIAL COLLEGE																
		Abington College	Agricultural Sciences	Altoona College	Arts and Arch	Behrend College	Berks College	Capital College	Commonwealth College	Communications	DUS	Earth and Min Sciences	Education	Engineering	Health and Hum Dev	Liberal Arts	Science	Smeal Business
Abington	127	14.2%	1.6%		2.4%			1.6%	0.8%	4.7%	20.5%	2.4%	3.9%	2.4%	3.1%	13.4%	6.3%	22.8%
Ag Sciences	173		76.9%							0.6%	9.2%	0.6%	1.2%	5.2%			4.6%	1.7%
Altoona	93		5.4%	3.2%		2.2%		1.1%		3.2%	24.7%		11.8%	10.8%	5.4%	20.4%	2.2%	9.7%
Arts and Arch	77		1.3%		37.7%					5.2%	26.0%	1.3%	1.3%	13.0%	2.6%	3.9%	5.2%	2.6%
Behrend	413		0.7%		0.2%	48.7%		0.5%	0.2%	2.2%	20.6%	0.2%	1.2%	10.4%	1.5%	4.1%	4.8%	4.6%
Berks	59		8.5%				11.9%			5.1%	23.7%		1.7%	13.6%	5.1%	3.4%	11.9%	15.3%
Capital	171		0.6%		0.6%	1.8%	1.2%	17.0%		4.1%	21.1%	1.8%	13.5%	18.1%	1.8%	9.9%	3.5%	5.3%
Commonwealth*	176		3.4%		1.7%			1.7%	11.9%	2.8%	24.4%	0.6%	10.8%	8.5%	9.1%	7.4%	2.8%	14.8%
Communications	244		2.5%		1.2%	1.2%	0.4%	0.4%		45.5%	23.0%	1.6%	4.1%	4.1%	2.0%	4.5%	1.6%	7.8%
EMS	40		2.5%								25.0%	55.0%		17.5%				
Education	224	0.4%	0.4%		1.3%			0.4%		1.3%	17.9%	0.9%	61.6%	1.3%	2.7%	4.9%	3.1%	3.6%
Engineering	376	0.3%	2.1%	0.3%		1.6%					8.5%	1.1%		83.5%			2.7%	
H & H D	367		4.1%	0.3%	1.4%	0.8%	0.3%	0.8%	0.3%	2.7%	27.8%	1.4%	6.8%	2.5%	37.3%	5.7%	3.5%	4.4%
Info Sci & Tech	77	1.3%	2.6%		1.3%			1.3%		1.3%	23.4%		2.6%	46.8%		5.2%	1.3%	13.0%
Liberal Arts	415	1.0%	2.4%		2.2%	1.9%	0.2%	1.9%	0.5%	2.9%	26.7%	0.5%	4.6%	6.0%	3.4%	37.3%	4.3%	4.1%
Science	115		5.2%			5.2%					13.9%	0.9%	1.7%	9.6%		4.3%	58.3%	0.9%
Smeal Business	500	0.4%	0.8%	0.4%	0.2%	1.4%	0.4%	0.4%	0.8%	1.2%	25.2%	0.2%	1.2%	11.2%	1.6%	2.2%	3.2%	49.2%

*The organizational structure of the Commonwealth College remained the same throughout the time of the analysis (between Fall 1998 and Fall 2004) as restructuring occurred in July 2005.

Table 7 – Final Graduating College and Initial College of Enrollment for Graduates From the Fall 1998 Cohort, University Park Initial Campus

FINAL COLLEGE OF GRADUATION	Total # Graduates from Fall 1998 Cohort	INITIAL COLLEGE										
		Agricultural Sciences	Arts and Arch	Communications	DUS	Earth and Min Sciences	Education	Engineering	Health and Hum Dev	Liberal Arts	Science	Smeal Business
Abington	7	14.3%	14.3%		14.3%		14.3%			14.3%	14.3%	14.3%
Ag Sciences	118	70.3%	3.4%		15.3%	0.9%		3.4%			4.2%	2.5%
Arts and Arch	206	0.5%	77.7%	2.9%	8.7%		.5%	2.9%		1.5%	4.9%	0.5%
Behrend	8		12.5%		12.5%			25.0%		12.5%	37.5%	
Berks	1				100%							
Capital	6		16.7%					33.3%				50.0%
Commonwealth*	4						25.0%				25.0%	50.0%
Communications	362	0.6%	3.3%	51.4%	19.6%	1.4%	2.8%	6.1%	1.1%	6.9%	4.4%	2.5%
EMS	107	1.9%		1.9%	15.9%	59.8%	1.9%	14.0%		2.8%	0.9%	0.9%
Education	270	1.1%	0.7%	2.6%	16.7%	1.4%	53.3%	3.3%	3.7%	5.2%	8.2%	3.7%
Engineering	680	0.3%	1.0%		4.1%	1.2%	0.3%	86.5%		0.2%	5.6%	0.8%
H & H D	454	3.1%	1.3%	1.5%	21.4%	0.2%	3.5%	2.9%	44.1%	3.1%	15.9%	3.1%
Info Sci & Tech	4				25.0%			50.0%				25.0%
InterCollege UG**	2							50.0%		50.0%		
Liberal Arts	635	1.3%	2.2%	4.1%	21.4%	0.9%	2.2%	5.7%	2.2%	46.8%	9.5%	3.8%
Science	403	0.3%	0.5%		8.2%		1.2%	7.7%	1.0%		80.4%	0.7%
Smeal Business	1,019	0.4%	0.7%	1.2%	20.2%	0.7%	0.7%	10.7%	1.9%	3.1%	3.9%	56.5%

*The organizational structure of the Commonwealth College remained the same throughout the time of the analysis (between Fall 1998 and Fall 2004) as restructuring occurred in July 2005.

**Two students graduated with Bachelor of Philosophy degrees.

Data and Methodology

All data for this analysis came from the Penn State Data Warehouse Official Student Enrollment table. The Official Student Enrollment table contains a snapshot of student enrollment each semester as of the sixth week of classes. The official tables were used because the data was “frozen” at one point in time; this avoided any methodological problems with students changing majors within a semester. The student’s college of choice upon entrance to Penn State is the student’s initial college.

The five outcomes were defined to be mutually exclusive and hierarchical, as listed on page 1, with graduation within the initial college the highest status. Students were placed into only one outcome category, with the five categories dependent on whether they had graduated or not and whether they were enrolled in or graduated from their initial college. For example, students who graduated from multiple colleges were assigned to the first category if one of the colleges was their initial college and to the second category if none of their degrees were from their initial college. In addition, if a student completed a baccalaureate degree but was also enrolled in the Fall 2004 semester, he or she was assigned to one of the first two outcome categories, depending on whether their graduating college was their initial college.