

SIXTH BIENNIAL REPORT ON FRESHMAN GRADUATION RATES FALL 1980 - FALL 1991 ENTERING CLASSES

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Graduation Rate Report --- **Entering Classes Fall 1980 - Fall 1991**

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Executive Summary

- Of first-time freshmen entering Cornell in Fall 1991, 90.2 percent earned a baccalaureate degree from one of the seven undergraduate colleges on the Ithaca campus within six years of their matriculation. This is the sixth year in a row that the graduation rate has been approximately 90 percent and is an increase of seven percentage points over the freshman class that entered in Fall 1980. (See page 3.)
- The proportion of students who initially enter Cornell as first-time freshmen and do not complete a degree at Cornell within six years of matriculation has decreased from 17 percent for those who entered in Fall 1980 to slightly less than 10 percent for the Fall 1991 entering class. (See pages 3 and 7)
- About a third of the Fall 1990 and less than 30 percent of the Fall 1991 attrition groups were required to leave or withdraw from Cornell. More than half of the Fall 1990 and close to two-thirds of the Fall 1991 attrition cohorts left Cornell voluntarily before completing a degree. Additionally, approximately nine percent of those classified in the attrition group both years either earned a Cornell degree after the six-year study window, have their graduation pending final approval of degree requirements, or are still currently enrolled as undergraduates at Cornell. (See pages 7-10.)
- The proportion of students who graduate early -- that is prior to the spring semester of what would be their fourth year at Cornell -- was greater than 4 percent for the Fall 1989 (4.5 percent), Fall 1990 (5.2 percent), and Fall 1991 (4.3 percent) entering classes (see Figure 3). This is a return to the patterns for the Fall 1981 (4.1 percent) and Fall 1982 (5.6 percent) entering classes. (See page 4.)
- Six year graduation rates vary by the college in which students matriculate, though graduation rates have been increasing for those entering each of Cornell's seven undergraduate colleges. (See pages 4-5.)
- Not all students who enter Cornell as first-time freshmen graduate in the same college in which they matriculate. The Colleges of Architecture, Art, and Planning; Engineering; and Human Ecology experience the greatest amount of out-migration, while the Colleges of Arts and Sciences and Agriculture and Life Sciences gain the most internal transfers. (See pages 5-6.)
- For those students who entered Cornell as first-time freshmen in Fall 1980 there was a gap of approximately 20 percentage points between Black, Hispanic, and Native American students whose six year graduation rate was approximately 68 percent and the approximately 87 percent graduation rate among Asian and White students. By the entering class of Fall 1987, this gap had been reduced to about 10 percentage points, and all five groups had seen gains in their individual six-year graduation rates. (See pages 6-7.)

Methodology

Population

The population for this study is first-time freshman matriculants (with no prior transfer work) who were initially enrolled at Cornell in the Fall terms of 1980 through 1991. Entering classes are identified by when they first entered the university. Transfer students -- those who come to Cornell from another college or university -- are excluded from this study.

Principal Concept and Study Design

The retention concept underlying this report is based on a six-year period from the point a student first matriculated at one of Cornell's seven undergraduate colleges to the time of graduation. The methods employed in this research design are similar to those employed in retention research completed in many national studies.

The research behind this report was conducted so that students who graduate within four, five, or six years can be distinguished. Students who did not graduate from any of Cornell's seven undergraduate colleges within six years of entering are classified in the attrition group, although we know that a small number may either be still enrolled or subsequently earn a Cornell undergraduate degree.

A year is delineated in terms of the academic calendar and comprises the Fall and Spring semesters and the Summer term. Students appearing in the four-year rate are those receiving degrees earlier than whichever Fall semester would signify the start of their fifth year. The single exception is in the College of Architecture, Art, and Planning where students enrolled in five-year programs have their time-to-degree window extended by a year. For example, students in five-year degree programs who graduate before the beginning of their sixth year are included among the four-year degree recipients. This was done in the interest of comparability since these students have made the same progress toward their degrees as those candidates for degrees normally requiring only four years of study.

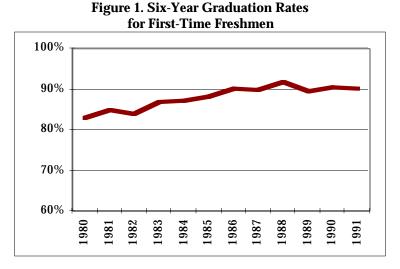
In addition, graduation rate information drawn from US News & World Report's annual America's Best Colleges Guide is included to help put Cornell's graduation rates into a larger context.

Analysis

Overall Graduation Rates

Of the 2,947 first-time freshmen that entered Cornell in Fall 1991, 90.2 percent earned a baccalaureate degree from one of the seven undergraduate colleges on the

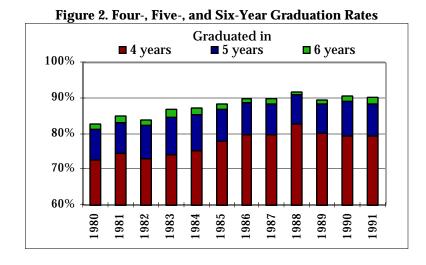
Ithaca campus within six years of matriculation. In addition to the Fall 1991 entering class, the five other most recent entering freshman classes that have had six years to complete a bachelors degree have all seen approximately 90 percent of their numbers complete a Cornell degree within six years -- 90.1 percent for those who entered in Fall 1986, 89.7 percent for those



entering in Fall 1987, 91.9 percent for Fall 1988, 89.4 percent for those entering in Fall 1989, and 90.5 percent for those entering in Fall 1990. This is an increase of seven percentage points over the 82.9 percent of the 2,785 member freshman class that entered in Fall 1980 (see Figure 1).

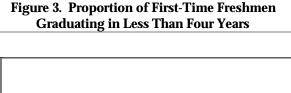
As Figure 2 indicates, the majority of this increase in graduation rates from the entering class of Fall 1980 can be accounted for by the increase in the number of students who are earning degrees in four years. For the Fall 1980 entering class

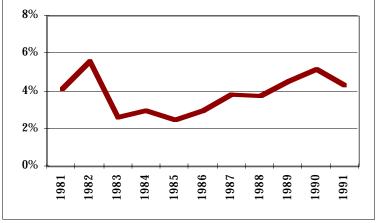
72.8 percent earned a
Cornell degree in four
years, while the Fall 1991
entering class saw
79.3 percent of their
number earning a degree
in four years. The
proportion of first-time
freshmen earning a degree
in five years increased
slightly between Fall 1980
(8.5 percent) and Fall 1991
(9.0 percent) entering
classes. The proportion of
those needing a sixth year



to complete their degree requirements has remained essentially unchanged -- 1.6 percent for the Fall 1980 entering class and 1.9 percent for those entering in Fall 1991.

The proportion of students who graduate early -- that is prior to the spring semester of what would be their fourth year at Cornell -- was greater than 4 percent for the Fall 1989 (4.5 percent), Fall 1990 (5.2 percent), and Fall 1991 (4.3 percent) entering classes (see Figure 3). This is a return to the patterns for the Fall 1981 (4.1 percent) and Fall 1982 (5.6 percent) entering





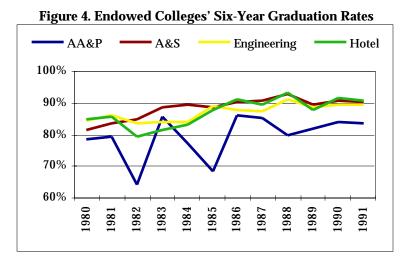
classes, after which there were six years of early graduation rates ranging from 2.5 percent (Fall 1985) to 3.8 percent (Fall 1987 and Fall 1988).

Graduation Rates by College

Six year graduation rates vary by the college in which students matriculate, though the rates have increased for those entering each of Cornell's seven undergraduate colleges over the twelve year period. For instance, as depicted in Figure 4, the trend in graduation rates among the four endowed colleges is clearly positive. For students entering the College of Arts and Sciences in Fall 1980, 81.3 percent earned a degree from Cornell within six years. For the Fall 1991 entering class that proportion had increased to 90.2 percent. Similarly, the College of Engineering saw an increase from 84.6 percent to 89.3 percent and the proportion of first-time entering freshmen to the

School of Hotel Administration who graduated from Cornell increased from 84.8 percent to 90.8 percent.

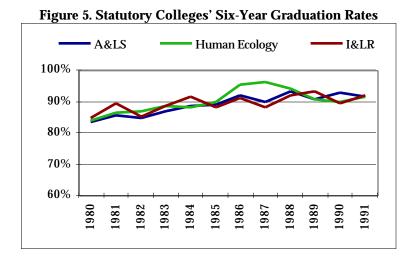
Six year graduation rates in the College of Architecture, Art, and Planning are lower than in the other endowed colleges and were more volatile among those classes entering in the early part of the decade. The college's



graduation rate peaked among students entering in Fall 1983 (85.7 percent) and Fall 1986 (86.0 percent), while Fall 1982 (64.4 percent) and Fall 1985 (68.6 percent) were valleys. Since the entering class of 1986, the graduation rate for the college has been between 80 percent and 86 percent.

Similarly, six-year graduation rates for students who initially enrolled in one of Cornell's statutory colleges also saw noticeable increases between freshman classes entering in Fall 1980 and Fall 1991 (see Figure 5). Among students entering the College of Agriculture and Life Sciences six-year graduation rates increased from 83.2 percent in Fall 1980 to

91.7 percent in Fall 1991.
Students who matriculated in the College of Human Ecology in Fall 1980 graduated at a rate of 84.0 percent while the proportion of those who entered in Fall 1991 was 91.3 percent (with peak graduation rates of 95.3 percent among the Fall 1986 entering class and 96.0 percent for Fall 1987). Students who enrolled in



the School of Industrial and Labor Relations in Fall 1991 boasted the highest graduation rate among the seven undergraduate colleges that year of 91.9 percent, an increase from 84.7 percent for the 1980 entering class.

Not all students who enter Cornell as first-time freshmen graduate in the same college in which they matriculate. The patterns of internal transfer have remained relatively stable over the twelve-year period of time under investigation. For instance, among the endowed colleges (see Figure 6), there is a considerable amount of transferring to other colleges among students who initially enter both the College of Architecture, Art, and Planning and the College of Engineering while there is rather little for students entering the College of Arts and Sciences and even less among students who matriculate in the School of Hotel Administration.

About two-thirds of the students who entered the College of Architecture, Art, and

Planning in Fall 1991
earned their degree from
the college, while
15 percent earned a degree
from another Endowed
college with another
3 percent earning a
Statutory degree. For
students who matriculated
in the College of
Engineering in Fall 1991,
20 percent earned their
degree from another
college with 65 percent of
these getting a degree from

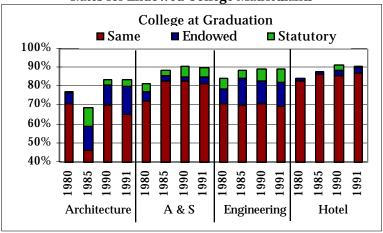


Figure 6. Internal Transfer Patterns and Six-Year Graduation Rates for Endowed College Matriculants

another Endowed college (primarily Arts and Sciences) and 35 percent from one of the Statutory colleges (primarily Agriculture and Life Sciences). The proportion of students initially enrolled in Arts and Sciences and the School of Hotel Administration in Fall 1991 who completed their degree elsewhere were 8.8 percent and 3.9 percent respectively.

Among the statutory colleges there are also strikingly different patterns of internal transfer that have

remained fairly consistent over this twelve-year period (see Figure 7). A considerable number of students transfer out of the College of Human Ecology (15.3 percent in 1991), a more modest amount transfer out of the College of Agriculture and Life Sciences (4.5 percent in 1991), and the School of Industrial and Labor Relations (6.3 percent in 1991).

College at Graduation **■** Endowed ■ Same ■ Statutory 100% 90% 80% 70% 60% 50% 40% 1985 19901980 1985 **Human Ecology** I&LR

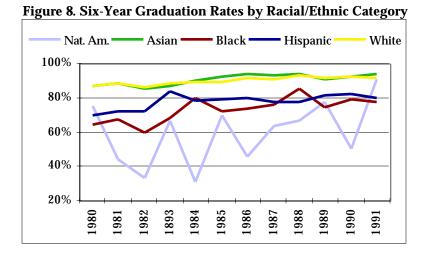
Figure 7. Internal Transfer Patterns and Six-Year Graduation Rates for Statutory College Matriculants

Graduation Rates by Racial/Ethnic Group

When looking at graduation rates among racial/ethnic groups at Cornell over this twelve-year time frame we also see that the trends are positive (see Figure 8). For those students who entered Cornell as first-time freshmen in Fall 1980 there was a gap of approximately 20 percentage points between the combined Black, Hispanic,

and Native American six year graduation rate of approximately 68 percent and the composite 87 percent graduation rate for Asian and white students. By the entering class of Fall 1989, this gap had been reduced to about 10 percentage points, and all five groups had seen gains in their individual six year graduation rates.

The volatility in six-year graduation rates among



Native American students can be attributed primarily to the very small numbers in each entering class. This has ranged from a low of 3 in the Fall 1983 entering class to a high of 16 in Fall 1984. Nevertheless, beginning with the exception of the Fall 1990

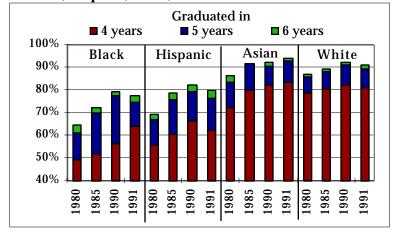
entering class (50.0 percent) the trend in the six-year graduation rate has also become more consistently positive (45.5 percent in Fall 1986, 63.6 percent in Fall 1987, 66.7 percent in Fall 1988, 77.8 percent in Fall 1989, and 90.9 percent in Fall 1991).

Among the four other racial/ethnic groups, six-year graduation rates for Blacks

increased from 64.6 percent for those entering in Fall 1980 to 77.8 percent in Fall 1991; Hispanics increased from 69.6 percent to 80.0 percent; Asians from 86.8 percent to 94.0 percent; and whites from 87.1 percent to 91.2 percent.

While Black and Hispanic students are more likely to take five or six years to complete their degrees than Asian or White students (see Figure 9), the increase in the

Figure 9. Four-, Five-, and Six-Year Graduation Rates for Black, Hispanic, Asian, and White First-Time Freshmen

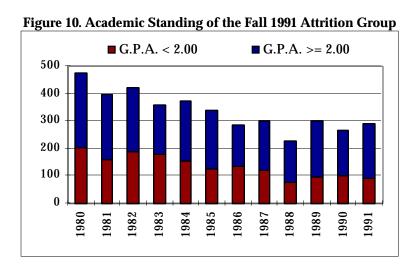


overall proportion of students graduating within six years is more attributable to the increase in students completing their degree requirements in four years.

Attrition Group

The proportion of students who initially entered Cornell as first-time freshmen who do not complete a degree at Cornell within six years of matriculation has decreased from 17 percent for those who entered in Fall 1980 to less than 10 percent for the Fall 1991 entering class (see Figure 1). Within this diminishing number of students who make up each entering class's attrition group, the proportion who are

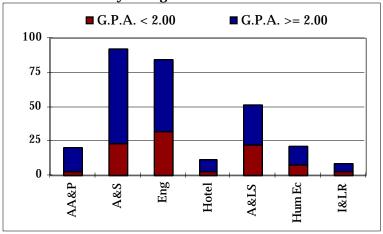
in good academic standing at the completion of their last semester of enrollment is increasing (see Figure 10). Among those 2,785 students who entered Cornell as first-time freshmen in Fall 1980 a total of 477 did not earn a degree within six years of matriculation; 57.7 percent of those students (275) were in good academic standing. For Fall 1991, the number of students in the attrition



group dropped to 289 out of an entering class of 2,947. Correspondingly the number of those in good academic standing had decreased to 195 yet their proportion of the attrition group increased to 68.7 percent.

As Figure 11 indicates, when comparing the proportion of the Fall 1991 entering class that did not earn a Cornell degree within six years, there is variability that is primarily a product of the size of the entering class in each college. Nevertheless, almost nine-tenths of the attrition group in Architecture, Art, and Planning (85 percent, 17 of 20) and three-fourths of those in Arts and Sciences

Figure 11. Academic Standing of the Fall 1991 Attrition Group by College of Matriculation

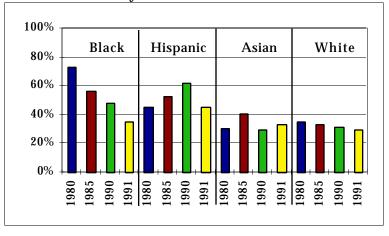


(75 percent, 69 of 92) and Hotel (75 percent, 9 of 12) were in good academic standing as of the last semester they were enrolled. The Colleges of Agriculture and Life Sciences (56.9 percent, 29 of 51) and Human Ecology (61.9 percent, 13 of 21) had the lowest proportion of their attrition group in good academic standing.

Figure 12 displays that there has been a difference in the proportion of the attrition group with a cumulative G.P.A. of less than 2.00 by racial/ethnic status

over the twelve year period of study. Generally only about a third of the Asian and white attrition group have a final Cornell G.P.A of less than 2.00. For Hispanic students the proportion of the attrition group with a G.P.A. of less than 2.00 has ranged from a high of 62.1 percent for the Fall 1990 entering class to a low of 45.0 percent for the Fall 1991 entering class. On the other hand, the proportion of Black

Figure 12. Proportion of Attrition Group with G.P.A. < 2.00 by Racial/Ethnic Status



students in the attrition group with a G.P.A. of less than 2.00 has fallen steadily from 73.4 percent for the Fall 1980 entering class to 56.8 percent for Fall 1985, 48.5 percent for Fall 1990, and 35.3 for Fall 1991 which puts them on a par with Asian and white students.

Additional information about the status of individuals who were part of the attrition groups for the entering classes of Fall 1990 and Fall 1991 is provided below. Table 1 shows that only 34.8 percent (93 of 267) of the Fall 1990 attrition group were required to leave or withdraw from Cornell. Slightly more than half of all the

 Table 1. Categories of Attrition, Fall 1990 Entering Class

Reason	AAP	A&S	Engr	Hotel	A&LS	HumEc	I&LR	Total
Graduated After Six-Year Window	3	5	3	2	2	1		16
Graduation Pending	3				1			4
Currently Registered		2		1	1	1		5
Leave								
Medical	1	4	2			3		10
Required	3	20	7		2	5	4	41
Voluntary	2	10	13		16	5	6	52
Unspecified				5				5
Withdrawal								
Required	1	10	29		12			52
Voluntary	3	6	11		7	2	1	30
Unspecified				2	1	2		5
Other/Unknown	4	29	5		4	4	1	47
Total	20	86	70	10	46	23	12	267

individuals in this attrition cohort took a non-required leave or withdrawal (55.8 percent, 188 of 280). Significantly, a total of 9.4 percent of the attrition group either earned a Cornell degree after the six-year study window (16 individuals), have their graduation pending final approval of degree requirements (4 individuals), or are still currently enrolled as undergraduates at Cornell (5 individuals).

Table 2 indicates that 29.8 percent (86 of 289) of the Fall 1991 attrition group were required to leave or withdraw from Cornell. Close to two-thirds of the individuals

Table 2. Categories of Attrition, Fall 1991 Entering Class

Reason	AAP	A&S	Engr	Hotel	A&LS	HumEc	I&LR	Total
Graduated After Six-Year Window	1				1	2	2	6
Graduation Pending	5			1	1		1	8
Currently Registered	3	3	2		1		1	10
Leave								
Medical	1	5	2		1			9
Required	2	18	4		4	5	3	36
Voluntary	2	29	13		14		2	60
Unspecified				4				4
Withdrawal								
Required		9	32	1	8			50
Voluntary	3	11	20		10	1		45
Unspecified	1			4		13		18
Other/Unknown	2	17	11	2	11			43
Total	20	92	84	12	51	21	9	289

in this attrition cohort took a non-required leave or withdrawal (61.9 percent, 179 of 289). A total of 8.3 percent of the attrition group either earned a Cornell degree after

the six-year study window (6 individuals), have their graduation pending final approval of degree requirements (8 individuals), or are still registered as undergraduates (10 individuals).

Inter-Institutional Comparisons

Consistently reliable graduation rate information covering the time period under consideration in this study for the full set of institutions that constitute Cornell's common application and admission overlap group is not easily accessible. One proxy for such data is found in the annual America's Best Colleges guide published each fall by U. S. News & World Report. For the past six years they have collected and displayed a graduation rate figure for each institution included in their rankings.

Table 3. Six-Year Graduation Rates for Cornell and its Overlap Group Source: USN&WR's Annual America's Best Colleges Guide¹

	1994	1995	1996	1997	1998	
Binghamton	75%	77%	79%	83%	79%	4%
Northwestern	88%	89%	89%	90%	91%	3%
Stanford	92%	93%	93%	93%	94%	2%
Cornell	88%	90%	90%	89%	89%	1%
Michigan	83%	84%	85%	85%	84%	1%
Harvard	97%	97%	97%	97%	97%	0%
Duke	93%	94%	95%	95%	93%	0%
Virginia	91%	92%	92%	93%	91%	0%
Johns Hopkins	88%	87%	87%	87%	88%	0%
Princeton	95%	95%	95%	95%	94%	-1%
MIT	90%	91%	91%	89%	89%	-1%
Penn	89%	90%	90%	87%	88%	-1%
Yale	95%	95%	96%	95%	93%	-2%
Dartmouth	95%	95%	95%	94%	93%	-2%
Brown	94%	94%	94%	93%	91%	-3%
Columbia	90%	95%	88%	88%	87%	-3%

Table 3 displays reported graduation rates for Cornell and the fifteen institutions that make up its common application and admission overlap group. Note in particular that only five institutions -- Cornell, Binghamton, Northwestern, Stanford, and Michigan -- have realized net gains from the beginning to the end of this period. Four institutions have had no net change, and seven institutions -- six Ivy League schools -- have experienced a decline from the beginning to the end of this period.

¹The rates displayed are four-year averages of six-year graduation rates. For example, the 1998 rates are the averages of six-year graduation rates for freshmen entering in Fall 1987, 1988, 1989, and 1990; the 1997 rates are the averages of six-year graduation rates for freshmen entering in Fall 1986, 1987, 1988, and 1989. The last column of the table displays the arithmetic difference between the rate published in 1998 and the rate published in 1994.