

Graduation and Retention Study Phase 5 Academics

Obviously students with low grades are less likely to graduate than those with high grades, but understanding the extent to which students do not graduate because of their academic performance is a harder problem. A similar challenge is to obtain some measure of the students that do not graduate for nonacademic reasons. This report focuses on these two somewhat vague questions and more generally the relationship between academic performance and graduation and retention.

To measure the role of grades in graduation and retention data, the grade point average (GPA) was divided into four bands and the cumulative GPA of the active students at the end of each fall semester was tracked. Specifically, the GPA was divided into four bands, 0 to 2.0 (At Risk), 2.0 to 2.75 (Below Average), 2.75 to 3.25 (Average), and 3.25 to 4.0 (Above Average). For the active students in a fall semester, the GPA Band for their cumulative GPA at the end of that semester was included in the study database. No GPA indicator was included for inactive students in a fall semester. By this means the accumulative academic performance of students could be tracked as they made progress toward a degree.

The first step was to identify a sub cohort of students for whom academic difficulties would more than likely be a predominant reason for not continuing their education at Lehigh. The intent was to include those students in danger of academic failure not just those actually dismissed. Therefore, the cohort had to be defined solely by GPA and not by the decisions of the university. Then the retention and graduation patterns of such a cohort provide a measure of academic failure among the students that do not earn a degree within six years.

Since a requirement for graduation is an cumulative GPA of 2.0, any student whose accumulative GPA falls below 2.0 at the end of a fall semester is academically at risk. Conversely, any student who is academically dismissed can hardly escape having his or her cumulative GPA below 2.0 at the end of at least one fall semester. Thus the sub cohort of students whose cumulative GPA falls below 2.0 at least once at the end of their first three fall semesters was used. This includes, for example, students who earn a 1.8 or 1.9 GPA in their first semester. Because they are above a 1.7, they do not go on academic probation, but they must improve or they will never graduate.

The primary issue is what portion of these students over come their academic difficulties and earn a Lehigh degree in six years. For the 1994 and 1995 cohorts 131 (11.8%) and 113 (10.8%) students respectively had a cumulative grade point average below 2.0 at least once at the end of a fall semester. The

six-year graduation rate of these students was 43% and 51% respectively. The sixth year status of the 124 (11.3%) students in the same sub cohort for the 1996 freshman cohort shows that 49% of them have already graduated, and 8% are still actively working on a Lehigh degree. Thus it is likely that the six-year graduation rate for the 1996 sub cohort will also be at least 50%. The prognosis for the 1997 and 1998 sub cohorts is between 40% and 45% of them graduating in six years. (See Progress Toward Degree of at Risk Students in the Tables.)

Those freshmen with a GPA over 2.75 at the end of their first semester also form an interesting sub cohort of students. These students appear capable initially of doing college work. In fact, since the GPA for all first semester freshmen was close to 2.80 from 1994 through 1997, this sub cohort is almost identical with the students in the top half of their class at the end of their first semester. Because for this sub cohort there is no hint of any initial academic difficulties with college level work at the end of the first semester of enrollment, it is reasonable to assume that students in this cohort do not leave Lehigh for academic reasons. Even if they get themselves into academic difficulties, there is likely to be some non-academic root cause, such as loneliness, money, alcohol, etc.

For the 1994 through 1997 freshman cohorts, the students who earned at least a 2.75 GPA in their first semester had a freshman retention rate that averaged 2.8% higher than the overall rate and a sophomore retention rate that averaged 2.3% higher than the overall all one. The junior retention rate was, however, at most 1% higher than the overall rate, so the effect of a strong start on retention diminishes over time.

The six-year graduation rate for this sub cohort was 91.7% in 1994 and 89.3% in 1995, and the number of students who did not graduate in six years in these two sub cohorts was 51 and 63 respectively. Since the predicted six-year graduation rates for the students with at least a 2.75 GPA in their first semester in 1996 and 1997 remains close to 90%, the expected loss of these students in the next two sub cohorts is also between 50 and 60.

A table of freshman inactivity rates by GPA band appears at the end of this report. It shows an average loss between the first and second years of 4.3% and 4.5% for Above Average and Average students respectively over 5 years. Although we have similar data tables for other key rates by GPA Band, we have not included them because we do not yet know the extent to which they are skewed by special programs, like the cooperative one with MCP Hahnemann School of Medicine.

Findings

1. If a student's cumulative GPA falls below 2.0, the probability that he or she will graduate in six years is by inference greater than 40% and some years as high as 50%.
2. Only 36% or roughly one third of the students who did not complete their degree in six years from the 1994 and 1995 cohorts had a cumulative GPA below 2.0 at least once at the end of a fall semester.
3. The portion of students that earn a GPA of at least 2.75 in their first semester and then do not graduate in six years may be increasing. It was 29.0% for the 1994 cohort and 35.2% for the 1995 cohort. For the 1996 cohort 37.2% of the students who have not yet completed their degree had an initial GPA of at least 2.75.
4. Roughly one third of the students who do not complete their Lehigh degrees in six years had an above average GPA in their first semester.
5. Although poor academic performance may be part of a student's decision not to continue their education at Lehigh, it appears that non-academic reasons play an important role in a majority of the cases.

Progress toward Degree of At-Risk Students

1994 Cohort

<u>Seventh</u> <u>Year Status</u>	<u>Active</u>	<u>Inactive</u>	<u>Graduated</u>	<u>Total</u>
Count	1	63	67	131
Percent	0.8%	48.1%	51%	100%

1995 Cohort

<u>Seventh</u> <u>Year Status</u>	<u>Active</u>	<u>Inactive</u>	<u>Graduated</u>	<u>Total</u>
Count	0	64	49	113
Percent	0.0%	56.6%	43%	100%

1996 Cohort

<u>Sixth</u> <u>Year Status</u>	<u>Active</u>	<u>Inactive</u>	<u>Graduated</u>	<u>Total</u>
Count	10	53	61	124
Percent	8.1%	42.7%	49%	100%

1997 Cohort

<u>Fifth</u> <u>Year Status</u>	<u>Active</u>	<u>Inactive</u>	<u>Graduated</u>	<u>Total</u>
Count	13	70	42	125
Percent	10.4%	56.0%	34%	100%

1998 Cohort

<u>Fourth</u> <u>Year Status</u>	<u>Active</u>	<u>Inactive</u>	<u>Graduated</u>	<u>Total</u>
Count	54	57	0	111
Percent	48.6%	51.4%	0%	100%

Inactivity Rates by GPA Band – Year 1 to 2

<u>Cohort Year</u>	<u>Above Average</u>	<u>Average</u>	<u>Below Average</u>	<u>At Risk</u>
1994	4.0%	3.6%	5.5%	44.1%
1995	2.3%	6.1%	6.7%	28.8%
1996	5.9%	4.5%	7.3%	17.1%
1997	3.6%	3.8%	5.8%	28.7%
1998	5.8%	4.5%	6.7%	29.9%
Average	4.3%	4.5%	6.4%	29.7%