

**THE STRATEGIC PLAN FOR INCREASING UNDERGRADUATE
RETENTION AND GRADUATION RATES
Final Report: January 2003**

Appendix A. Why students leave GW before graduation: An analysis of the demographic variables of students entering between 1998 to 2001

Method

The data used for the analysis below come from a variety of sources and relies heavily on university records for accuracy. It includes 8,528 students who enrolled as freshmen between 1998 and 2001. Students' GPA, financial aid information, school of enrollment, and current enrollment status (enrolled, graduated, not enrolled) come from student records (Banner). Housing Services provided data for freshmen housing assignments. The psychosocial information about why students chose to enroll comes from surveys distributed to new students at Colonial Inauguration. Data from these sources were merged using students social security number or PIDN (personal identification number).

Academic Quality of Incoming Students

The Admissions Office ranks all admitted students on a five-point scale¹. For example, those given the highest admissions rating (AR-1) are typically in the 90-95 percentile of their high school class and have a total SAT of at least 1350.

A higher percentage of GW's best and brightest admitted students (AR-1) are likely to remain at GW compared to their peers with lower ratings. The only school for which retention varied significantly by admissions rating is CCAS.

Admissions rating	Total	CCAS	ESIA	SBPM	SEAS
AR-1	89%	90%	88%	89%	83%
AR-2	84%	84%	85%	87%	75%
AR-3	84%	83%	86%	85%	81%
AR-4	85%	86%	86%	88%	76%

The mean SAT scores of those who stay and leave are very similar. There is no statistically significant difference between the mean SAT scores of those who leave or stay at GW.

Caveat: Almost all students with an admissions rating of 1 receive merit aid. The percentage of AR-2 students receiving merit aid has declined considerably over the past few years. Students with AR-3 and AR-4 do not receive merit aid.

Grades at GW

The cumulative GPA for those who stay at GW is 3.16; for those who leave, it is 2.68. However, if those with a GPA of less than 2.0 are removed from the pool (assuming they do not have a choice about staying), the difference between the GPAs of the retained or attrited group is smaller.

¹ Very few admitted students are ranked a 5.

Mean GPA by enrollment status

	Total	CCAS	ESIA	SBPM	SEAS
Retained	3.16	3.18	3.22	3.14	2.81
Attrited	2.68	2.77	2.69	2.59	2.05

**Mean GPA by enrollment status
(Excludes those whose GPA <2.0)**

	Total	CCAS	ESIA	SBPM	SEAS
Retained	3.20	3.21	3.24	3.16	2.94
Attrited	3.05	3.07	3.05	3.08	2.64

Caveat: I would caution against making the assumption that we are retaining better students. At this point, the GPA used for comparisons is cumulative. For those entering in 1998, their cumulative GPA may represent eight semesters of grades; those who left have fewer semesters of grades included in their GPA.

Students' Home Region

Home region is defined as the state or country students list in their permanent address. For purposes of this study, home region is divided into two groups: "mid-Atlantic" and "other." Mid-Atlantic region is defined broadly and includes those east coast states that are considered GW's primary market for recruitment and which a high percentage of GW students call home. The states included in the mid-Atlantic grouping are: Connecticut, Delaware, District of Columbia, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, and Virginia. Approximately 62% of all students in the data set are from the mid-Atlantic region. The students who do not consider these eight states and DC home were placed in "Other" region.

Overall, students who are *not* from the mid-Atlantic region (other) are more likely to leave GW than those who are from the mid-Atlantic region. However, when looking at differences within each school, the retention of students by home region is significantly different only for students in CCAS and SBPM.

Percentage of students who remained at GW by Home Region

	Total	CCAS	ESIA	SBPM	SEAS
Mid-Atlantic	86%	86%	87%	89%	78%
Other	83%	83%	84%	83%	77%

The combination of students' home region and their admissions rating produces interesting findings. A higher percentage of the "better" mid-Atlantic region students remain at GW compared to their peers from other states.

**Percentage of students who remained at GW
by admissions rating and home region**

	AR-1	AR-2	AR-3	AR-4
Mid-Atlantic	91%	86%	86%	86%
Other	86%	82%	81%	84%

Interestingly, students who are not from the mid-Atlantic region tend to earn slightly higher grades regardless of whether they leave or stay at GW.

Cumulative first year GPA of students who remained or left GW by home region

	GPA of those Retained	GPA of those Attrited
Mid-Atlantic	3.14	2.63
Other	3.19	2.75

Financial reasons

Receiving merit or need-based financial aid does not, in and of itself, have any bearing on retention; 85% of students who received some form of financial aid remained at GW as did 85% of those who did not receive any form of aid. However, there are statistically significant differences in family income and amount of aid received between those who remained or left. Typically, those who remained at GW reported higher family incomes and received, on average, larger need- and merit-based financial aid packages compared to those who left.

**Mean financial aid packages and family income of those who received
financial assistance by enrollment status**

	Remained	Attrited
Family income ²	\$97,200	\$87,600
Average institutional aid package	\$12,900	\$11,800
Average merit aid package	\$10,500	\$ 9,200
Average amount of financial aid paid	\$20,000	\$18,800

The interaction between financial aid and home region affects retention in interesting ways. Of the full-payers (those not receiving any financial assistance from GW) who left GW, 34% are from home states outside of the mid-Atlantic region compared to 29% who were from the Mid-Atlantic states. There is no difference in the entering academic qualifications of these two groups.

However, a higher percentage of highly qualified students who were not from the mid-Atlantic region who were on financial aid chose to leave compared to their mid-Atlantic counterparts on aid who chose to leave.

² Family income is available only for those students who applied for and received any form of financial assistance.

Comparison of the admissions rating of students who left and who received financial assistance by home region

	Mid-Atlantic	Other
AR-1	9%	17%
AR-2	44%	44%
AR-3	29%	27%
AR-4	18%	12%

Thus, a higher percentage of students not from the mid-Atlantic region who left GW were either full-payers or have higher academic profiles than their mid-Atlantic counterparts who left.

First year residence

Contrary to popular belief, living in Thurston Hall does not increase the likelihood of students leaving GW. A higher percentage of students who lived in Thurston, HOVA, and Lafayette Halls remained at GW compared to those who lived in other Foggy Bottom residences. The four halls with higher attrition rates are Mitchell (which is made up of single rooms), Strong (which is all women), Madison, and Crawford Halls. Strong, Madison, and Crawford Halls have a combination of freshmen and upper-class students living there.

Percentage of students who remained at GW by residence hall assignment

Thurston	Crawford	HOVA	Lafayette	Madison	Mitchell	Strong
86%	82%	88%	87%	83%	83%	80%

The number of people sharing a room has a small impact on retention. Interestingly, it is those who were assigned a single room or a room with five other roommates (a “six”) this first semester who left GW.

Percentage of students who remained at GW by residence hall room size

Room size	1	2	3	4	5	6
Retained	83%	86%	87%	87%	86%	84%

Being involved as freshmen in a living and learning community, both academic and not academic, has a positive impact on retention. A higher percentage of students who lived in a residential community their first year remained at GW compared to those who did not reside in a community. . The community’s linkage to a credit-bearing course has no bearing on retention; whether the living/learning community is located at either Foggy Bottom or Mount Vernon also does not affect retention rates.

Percentage of students who remained at GW by placement in residential community

Living in a living/learning community	88%
Not living in a living/learn community	84%

Caveat: The expansion of freshmen living and learning communities began in Fall 2000. Prior to that, fewer than 200 students were involved in an academic or non-academic residential program. Thus, the increase in retention of students in residential communities may be affected by their number of years at GW. There is an inverse correlation between retention rates and number of years at GW. The more years a cohort of entering students is enrolled at GW, the lower the retention rate.

Reasons for choosing GW

At Colonial Inauguration, new students complete a survey inquiring about the importance of several factors in their choice of enrolling at GW. The factors included: GW's location, availability of merit or need-based aid, GW's academic reputation and academic experience, its diverse student body, opportunities for work experiences, and their ranking of GW in their choices of universities to enroll. None of the reasons freshmen gave for choosing GW³, except the availability of merit- or need-based aid, made a difference in retention. Those who ranked GW as their first choice were no more likely to remain at GW than those who ranked it as their second, third, or fourth choice. Similarly, those who chose GW for its location, for a rigorous academic experience, or its diverse student body were no more likely to remain than those who did not choose it for these reasons.

Recommendations

1. Develop retention programs directed at students who are not from the mid-Atlantic region, such as additional programs like the Ambassadors Program (having upper class students serve as ambassadors to incoming students from their home state).
2. Encourage the development of more community living options. Avoid assigning freshmen to single rooms and to halls where freshmen are in the minority.
3. Strike a balance between awarding need-based and merit-based aid. The aid packages benefit the more affluent and academically able student. We are losing the middle-of-the-road academic student who may greatly increase the socio-economic diversity of undergraduates.

GW is revising its financial aid policy to increase the amount of merit aid offered to its top students. Given that the pool of money available for any aid is fixed, increasing merit aid means that there is less need-based aid available for needy students.

Currently, students who were not offered merit aid when they initially enrolled in GW are offered a \$10,000 merit scholarship if they earn a 3.6 GPA after taking 30 credits at GW. Awards are made once a year at the end of the spring semester. Starting with the class entering in 2003, Presidential Merit Scholarships of \$12,000 will be offered to those who

³ The data was collected from a New Student Survey distributed to all freshmen attending Colonial Inauguration.

after 30 credits at GW earn a 3.7 GPA and who are not receiving merit aid. In addition, students who have earned 60 credits at GW and have a GPA of 3.8 will receive a Presidential Recognition Award of \$2,500-\$4,000 on top of the merit award they receive. Both groups must maintain a 3.2 GPA, which is up from 3.0 in prior years.

While we certainly want to keep our better students, I am concerned that financial aid will not benefit the truly needy. Tying awards to GPA may result in students taking less rigorous courses and increase student “haggling” with professors over grades, since so much money is at stake. Moreover, it is not clear that the merit aid will improve retention. The merit aid is awarded after spring semester grades are posted. By that time, students who planned on transferring elsewhere may have received word about their admission status and made arrangements to leave GW. It may be that the award benefits those who were not planning to leave GW or who had not been accepted at another institution.