

Memo

To: MSA Retention Study Group – Susan Hunter, Sharron Murphy, Larry Smiley, Julie Wagester, Jody Hassen
From: Jamie Slater
CC: Terry Rawls, Suzy Clendening
Date: September 18, 2006
Re: MSA Retention Study, Special Focus on Stopouts

The tables in this section of the MSA Retention Study are focused upon stopouts from the program. These data provide a profile of the “typical” stopout, and attempt to identify any differences from the larger group of students. The data are drawn from the same source as the overall retention study – that is, a database of 154,000 course enrollments of MSA students between 19981 and 20051.

First, a definition. For the purposes of this study, a stopout is not merely an individual who was enrolled last term, but didn’t re-enroll in the current term. Stopout counts and rates are not measured until one full term has been completed since the student’s last enrollment.

Stopout Behavior Patterns (see histogram and line graph)

- The “typical” MSA student stops out an average of 2.5 terms, with a very large standard deviation of 3.604 terms. These data are based upon the enrollment histories of 12,615 MSA students since 1998.
- Stopouts re-enroll in patterns that are largely predictable, based upon 12,615 enrollment histories, 19981 – 20051:
 - For any given year’s admit group, the Summer 2 term of any year will see the highest percent of stopouts re-enroll (as a percent of Summer 2 enrolled students).
 - Fall terms will see the second-highest percent of stopout re-enroll (as a percent of Fall enrolled students).
 - The percent of Summer 2 or Fall term enrollments that are accounted for by stopout re-enrollments will rise over time, from about 55% in the group’s second year, to about 80% of those enrolled in their sixth year.
 - Stopouts re-enroll at much lower rates in Spring and Summer 1 terms, as a percent of current term enrollments.

Stopout Characteristics – Statistically Significant Differences

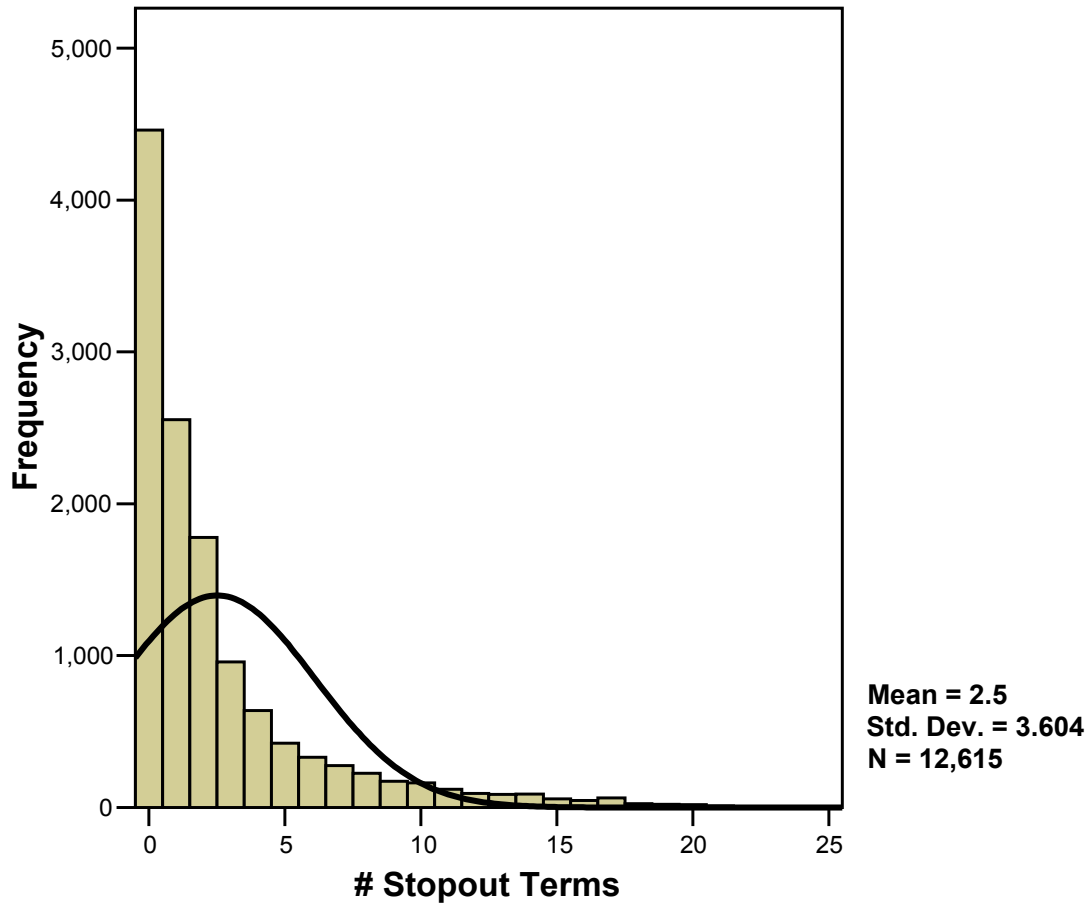
Contingency tables, with tests for statistical significance were developed to show different stopout behaviors broken out by student characteristics. Only one set of comparisons – stopping out by MSA concentration - met the twin criteria of statistical and practical significance. Those findings are summarized, as follows:

- **Software Engineering** students maintained stopout patterns that differed significantly from those of students in other concentrations. Software Engineering students refrained from stopping out at all at a **much lower** rate than other groups. Moreover, they stopped out for 1-2 terms at a **much higher** rate than other concentration groups, and stopped out for 3-5 terms at a **higher** rate than other groups.
- **Health Services Administration** students also maintained stopout patterns that differed significantly from the aggregate. These students refrained from stopping out at a rate **higher** than other groups. Moreover, Health Services Administration students stopped out for 3-5 terms **and** for > 5 terms at rates **lower** than other groups.
- **Information Resource** students stopped out for 3-5 terms **and** for > 5 terms at rates **higher** than other groups.
- **Public Administration** students stopped out for > 5 terms at the **highest** rate of any group.

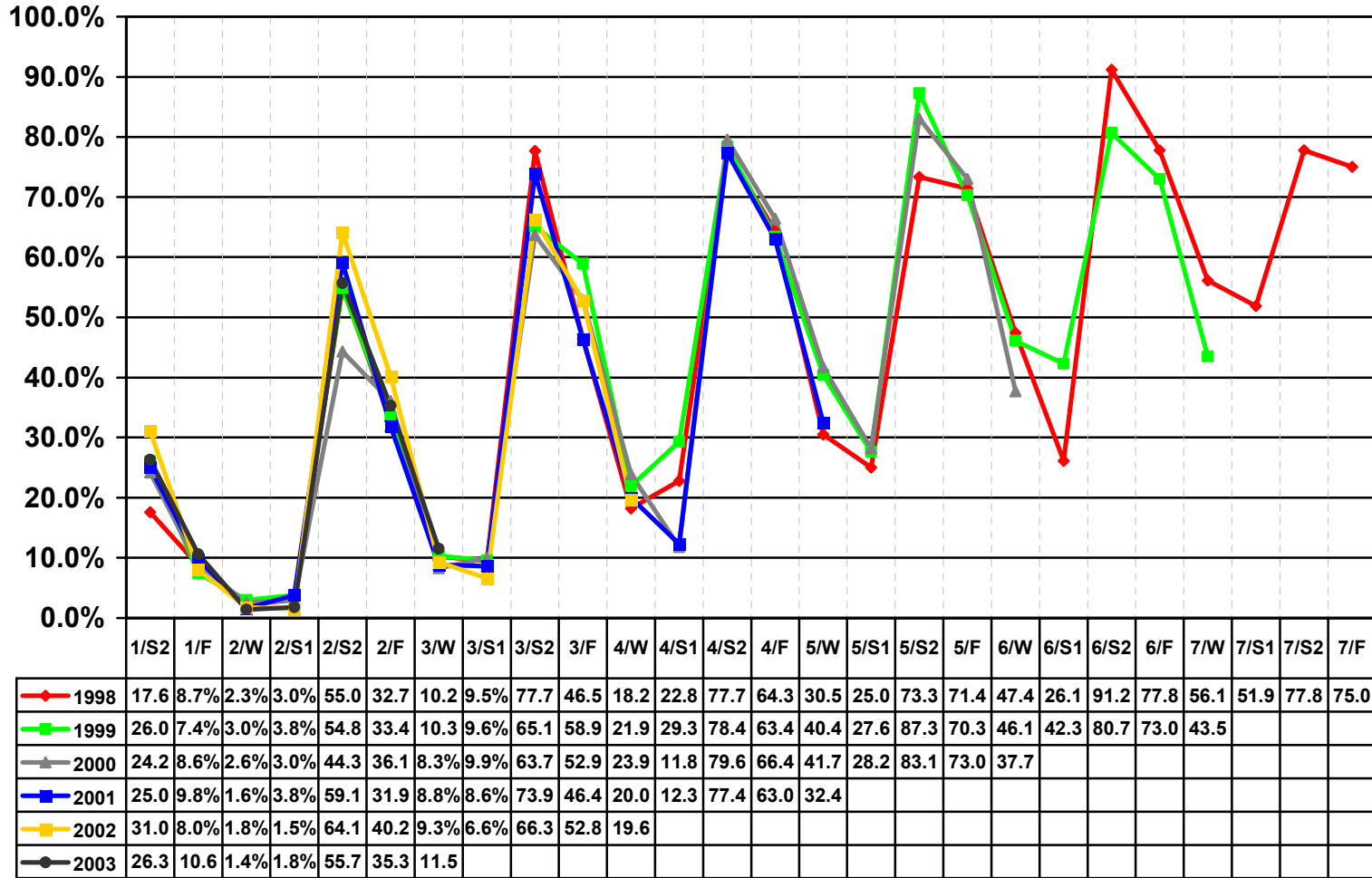
Stopout Profile

Students who stopped out during their MSA program, by and large, are representative of the aggregate characteristics of MSA students, in terms of gender and race/ethnicity. There appear to be some differences in the area of military status. If that is judged to be a student attribute of importance, then a more focused study of that data will be undertaken.

Stopouts in the MSA Program: Number of Terms Stopped Out, All Students 1998 - 2003



**MSA Enrollment Pattern 4:
Stopouts Who Re-Enrolled, as a Percent of Enrolled Students, by Term**



Contingency Table: MSA Students Who Did and Did Not Stop Out, by Concentration

		Stopout History				Total
		Did Not Stop Out	1-2 Terms	3-5 Terms	More than 5 Terms	
General Administration	Count	1,467	1,370	693	594	4,124
	Expected Count	1471.1	1409.8	641.4	601.7	4124.0
	% of Concentration group	35.6%	33.2%	16.8%	14.4%	100.0%
	% of Stopout History group	36.6%	35.7%	39.7%	36.2%	36.7%
Health Services Administration	Count	859	776	273	280	2,188
	Expected Count	780.5	748.0	340.3	319.2	2188.0
	% of Concentration group	39.3%	35.5%	12.5%	12.8%	100.0%
	% of Stopout History group	21.4%	20.2%	15.6%	17.1%	19.5%
Human Resource Administration	Count	927	940	398	380	2,645
	Expected Count	943.5	904.2	411.4	385.9	2645.0
	% of Concentration group	35.0%	35.5%	15.0%	14.4%	100.0%
	% of Stopout History group	23.1%	24.5%	22.8%	23.2%	23.5%
Public Administration	Count	250	230	110	129	719
	Expected Count	256.5	245.8	111.8	104.9	719.0
	% of Concentration group	34.8%	32.0%	15.3%	17.9%	100.0%
	% of Stopout History group	6.2%	6.0%	6.3%	7.9%	6.4%
Information Resource Administration	Count	454	419	226	219	1,318
	Expected Count	470.2	450.6	205.0	192.3	1318.0
	% of Concentration group	34.4%	31.8%	17.1%	16.6%	100.0%
	% of Stopout History group	11.3%	10.9%	12.9%	13.4%	11.7%
Software Engineering Management	Count	50	105	47	37	239
	Expected Count	85.3	81.7	37.2	34.9	239.0
	% of Concentration group	20.9%	43.9%	19.7%	15.5%	100.0%
	% of Stopout History group	1.2%	2.7%	2.7%	2.3%	2.1%
Total	Count	4,007	3,840	1,747	1,639	11,233
	Expected Count	4007.0	3840.0	1747.0	1639.0	11233.0
	% of Concentration group	35.7%	34.2%	15.6%	14.6%	100.0%
	% of Stopout History group	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	Degrees of Freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	74.015(a)	15	.000
Likelihood Ratio	76.110	15	.000
Linear-by-Linear Association	10.943	1	.001
N of Valid Cases	11233		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.87.

MSA Stopouts, 19981 – 20051: A Profile

	Students Who Stopped Out:							
	Did Not Stop Out		1 – 2 Terms		3, 4 or 5 Terms		More Than 5 Terms	
	Count	Percent of Total	Count	Percent of Total	Count	Percent of Total	Count	Percent of Total
GENDER:								
Female	2,469	55.3	2,345	54.1	1,105	54.7	1,002	55.6
Male	1,992	44.7	1,988	45.9	915	45.3	799	44.4
Total	4,461	100.0	4,333	100.0	2,020	100.0	1,801	100.0
RACE/ETHNICITY:								
White	1,884	49.3	1,906	52.2	949	54.8	818	52.5
African American	1,765	46.2	1,552	42.5	718	41.5	681	43.7
Hispanic	175	4.6	191	5.2	64	3.7	58	3.7
Total	3,824	100.0	3,649	100.0	1731	100.0	1557	100.0
MILITARY STATUS:								
Active	235	68.3	417	77.4	203	78.4	190	74.5
Dependent	34	9.9	40	7.4	20	7.7	11	4.3
Reserve	20	5.8	22	4.1	11	4.2	13	5.1
Retired	36	10.5	37	6.9	15	5.8	34	13.3
VA	19	5.5	23	4.3	10	3.9	7	2.7
Total	344	100.0	539	100.0	259	100.0	255	100.0
CONCENTRATION:								
General Administration	1,467	36.6	1,370	35.7	693	39.7	594	36.2
Health Services Administration	859	21.4	776	20.2	273	15.6	280	17.1
Human Resource Administration	927	23.1	940	24.5	398	22.8	380	23.2
Public Administration	250	6.2	230	6.0	110	6.3	129	7.9
Information Resource Management	454	11.3	419	10.9	226	12.9	219	13.4
Software Engineering Administration	50	1.2	105	2.7	47	2.7	37	2.3
Total	4,007	100.0	3,840	100.0	1747	100.0	1639	100.0