

Enrollment, Course Success and One-Year Throughput through Transfer-Level English

The following analysis was conducted per request of COM's English Department. The analysis examines 1-year completion of transfer-level English from initial English enrollment at COM. Students included in the analysis were those taking their first English course at COM in Fall 2019, Spring 2020, and Fall 2020. All students taking their first English course at COM were included, regardless of their educational goal.

Data tables 1-6 show the fields described below, by term of first enrollment and for the three starting semesters combined. Results are disaggregated by GPA band, race/ethnicity, gender, age group, and SAS (documented disability) status.

Enrollment

Number of students taking their first English course at COM enrolled in ENGL 120, 120AC, 120SL, 150, and 150 with the corequisite 150C course. The students enrolled in the Puente section of ENGL 150 and 150C are not included in the ENGL150/C category, but are analyzed and shown as a separate group.

Success rate

The number and percentage of students earning a grade of A,B,C, or P in the initial course. The success rate for ENGL150/C shows the success rate in the ENGL150 section, not the 150C section.

Enrollment in transfer-level English

The number and percentage of students who enrolled in ENGL150 at COM within the first year of enrolling in their first English course. For students initially enrolled in ENGL150, the enrollment number is the same as the field indicating initial enrollment in ENGL150 or 150/C, and the percentage is 100%.

Completion of transfer-level English within 1 year ("1-year throughput")

The number and percentage of students earning a grade of A,B,C, or P in ENGL150. The percentage denominator is the number of students enrolled in the first English course in the left-hand column; it is not a success rate for the transfer-level English course, but the throughput rate from the starting course.

Significance Tests

Oneway ANOVA analysis with Bonferroni post-hoc comparisons were run to determine whether rates of 1-year completion of transfer-level English ("throughput") were statistically significant among groups of students starting in different English courses. The following lists the significant differences in throughput rates between groups. Differences for students starting in the Puente sections of English 150 and for 150SL are not noted here, as these courses are for specific groups of students not comparable to those enrolled in other gateway English courses. All differences are significant at $p < .05$ unless otherwise noted. ANOVA tables are presented in Appendix A.

All students combined

150 significantly higher than 120, 120AC, 120SL

150C significantly higher than 120

GPA 0 - 2.6

150 marginally higher than 120AC ($p < .09$)

GPA 2.6 – 4.0

150 significantly higher than 120

150C significantly higher than 120

No GPA

150 significantly higher than 120

Hispanic/Latino/a/x

150 significantly higher than 120

150 significantly higher than 120AC

Multiracial

150 significantly higher than 120

150 marginally higher than 120AC ($p < .079$)

150C significantly higher than 120

White

150 significantly higher than 120

150 significantly higher than 120AC

150C significantly higher than 120

150C marginally higher than 120AC ($p < .076$)

Female

150 significantly higher than 120

150 significantly higher than 120AC

Male

150 significantly higher than 120

150 significantly higher than 120AC

150C significantly higher than 120

Age 19 or younger

150 significantly higher than 120

150 significantly higher than 120

Age 40 – 49

150 significantly higher than 120

Age 50 and older

150 significantly higher than 120

Not SAS

150 significantly higher than 120

150 significantly higher than 120AC

150C significantly higher than 120

SAS

150 significantly higher than 120

Table 1. All students combined

Term of First English Enrollment

First English Course	Fall 2019						Spring 2020						Fall 2020						Total					
	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year
120AC	22	82%	15	68%	12	55%	6	67%	2	33%	1	17%	19	63%	9	47%	7	37%	47	72%	26	55%	20	43%
120SL	18	67%	11	61%	9	50%	8	63%	3	38%	2	25%	17	65%	9	53%	6	35%	43	65%	23	53%	17	40%
120	41	63%	22	54%	14	34%	16	56%	8	50%	6	38%	31	74%	12	39%	10	32%	88	66%	42	48%	30	34%
150/C	17	56%	17	100%	13	76%	18	61%	18	100%	11	61%	4	25%	4	100%	1	25%	39	55%	39	100%	25	64%
150/C-Puente	22	68%	22	100%	18	82%							18	89%	18	100%	16	89%	40	78%	40	100%	34	85%
150	277	74%	277	100%	210	76%	141	65%	141	100%	94	67%	283	74%	283	100%	212	75%	701	72%	701	100%	516	74%
Total	397	72%	364	92%	276	70%	189	64%	172	91%	114	60%	372	73%	335	90%	252	68%	958	71%	871	91%	642	67%

Table 2: by GPA Band

	Term of First English Enrollment																								
	Fall 2019						Spring 2020						Fall 2020						Total						
	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	
0 - 2.6	120AC	6	50%	1	17%	1	17%	2	50%	1	50%	0	0%	6	33%	3	50%	1	17%	14	43%	5	36%	2	14%
	120SL	1	0%	0	0%	0	0%	1	100%	0	0%	0	0%	3	33%	0	0%	0	0%	5	40%	0	0%	0	0%
	120	11	64%	7	64%	4	36%	7	29%	3	43%	2	29%	10	50%	3	30%	2	20%	28	50%	13	46%	8	29%
	150/C	6	40%	6	100%	4	67%	7	29%	7	100%	2	29%	2	0%	2	100%	0	0%	15	29%	15	100%	6	40%
	150/C-Puente	5	60%	5	100%	4	80%							4	75%	4	100%	3	75%	9	67%	9	100%	7	78%
	150	44	48%	44	100%	22	50%	21	43%	21	100%	10	48%	43	51%	43	100%	24	56%	108	48%	108	100%	56	52%
2.6 - 4.0	120AC	8	100%	7	88%	6	75%	3	67%	0	0%	0	0%	10	80%	5	50%	5	50%	21	86%	12	57%	11	52%
	120SL	8	63%	5	63%	4	50%							4	50%	3	75%	2	50%	12	58%	8	67%	6	50%
	120	14	79%	8	57%	6	43%	2	50%	2	100%	1	50%	17	82%	7	41%	6	35%	33	79%	17	52%	13	39%
	150/C	11	64%	11	100%	9	82%	10	90%	10	100%	9	90%	2	50%	2	100%	1	50%	23	74%	23	100%	19	83%
	150/C-Puente	17	71%	17	100%	14	82%							12	100%	12	100%	12	100%	29	83%	29	100%	26	90%
	150	192	78%	192	100%	154	80%	95	71%	95	100%	69	73%	199	76%	199	100%	153	77%	486	76%	486	100%	376	77%
No GPA	120AC	8	88%	7	88%	5	63%	1	100%	1	100%	1	100%	3	67%	1	33%	1	33%	12	83%	9	75%	7	58%
	120SL	9	78%	6	67%	5	56%	7	57%	3	43%	2	29%	10	80%	6	60%	4	40%	26	73%	15	58%	11	42%
	120	16	50%	7	44%	4	25%	7	86%	3	43%	3	43%	4	100%	2	50%	2	50%	27	67%	12	44%	9	33%
	150/C							1	0%	1	100%	0	0%							1	0%	1	100%	0	0%
	150/C-Puente													2	50%	2	100%	1	50%	2	50%	2	100%	1	50%
	150	41	80%	41	100%	34	83%	25	63%	25	100%	15	60%	41	88%	41	100%	35	85%	107	79%	107	100%	84	79%
Total	495	71%	440	85%	325	63%	233	66%	187	79%	127	54%	460	72%	399	83%	286	60%	1,188	70%	1,026	83%	738	60%	

Table 3. by Race/Ethnicity

		Term of First English Enrollment																							
		Fall 2019					Spring 2020					Fall 2020					Total								
		# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year				
Asian	120AC	3	100%	3	100%	3	100%				3	67%	2	67%	2	67%	6	83%	5	83%	5	83%			
	120SL	4	25%	2	50%	2	50%	4	75%	1	25%	1	25%	3	33%	1	33%	0	0%	11	45%	4	36%	3	27%
	120	5	40%	2	40%	1	20%	2	100%	1	50%	1	50%				7	57%	3	43%	2	29%			
	150	15	67%	15	100%	11	73%	7	86%	7	100%	6	86%	11	80%	11	100%	8	73%	33	75%	33	100%	25	76%
Black or Afri..	120AC	2	100%	2	100%	1	50%										2	100%	2	100%	1	50%			
	120SL	1	100%	1	100%	1	100%										1	100%	1	100%	1	100%			
	120	1	100%	1	100%	1	100%										1	100%	1	100%	1	100%			
	150	10	78%	10	100%	7	70%	8	38%	8	100%	3	38%	4	25%	4	100%	1	25%	22	52%	22	100%	11	50%
Hispanic	120AC	12	67%	7	58%	5	42%	2	50%	0	0%	0	0%	8	38%	3	38%	2	25%	22	55%	10	45%	7	32%
	120SL	10	70%	6	60%	4	40%	2	100%	1	50%	1	50%	9	67%	4	44%	4	44%	21	71%	11	52%	9	43%
	120	12	58%	6	50%	4	33%	8	38%	3	38%	2	25%	14	86%	6	43%	5	36%	34	65%	15	44%	11	32%
	150/C	9	25%	9	100%	6	67%	9	33%	9	100%	3	33%	3	0%	3	100%	0	0%	21	25%	21	100%	9	43%
	150/C-Puente	22	68%	22	100%	18	82%							18	89%	18	100%	16	89%	40	78%	40	100%	34	85%
	150	93	65%	93	100%	62	67%	37	54%	37	100%	21	57%	88	68%	88	100%	62	70%	218	64%	218	100%	145	67%
Multi-Racial	120AC							1	0%	0	0%	0	0%	3	100%	2	67%	1	33%	4	75%	2	50%	1	25%
	120SL													1	100%	1	100%	1	100%	1	100%	1	100%	1	100%
	120	3	33%	1	33%	0	0%							3	67%	0	0%	0	0%	6	50%	1	17%	0	0%
	150/C							3	100%	3	100%	3	100%							3	100%	3	100%	3	100%
White	150	24	74%	24	100%	19	79%	8	63%	8	100%	5	63%	18	83%	18	100%	16	89%	50	76%	50	100%	40	80%
	120AC	4	100%	2	50%	2	50%	3	100%	2	67%	1	33%	5	80%	2	40%	2	40%	12	92%	6	50%	5	42%
	120SL	1	100%	0	0%	0	0%							3	67%	2	67%	1	33%	4	75%	2	50%	1	25%
	120	16	75%	9	56%	6	38%	6	67%	4	67%	3	50%	14	64%	6	43%	5	36%	36	69%	19	53%	14	39%
	150/C	7	86%	7	100%	6	86%	6	83%	6	100%	5	83%	1	100%	1	100%	1	100%	14	86%	14	100%	12	86%
150	119	82%	119	100%	101	85%	73	73%	73	100%	54	74%	150	75%	150	100%	116	77%	342	77%	342	100%	271	79%	
Total	495	71%	440	85%	325	63%	233	66%	187	79%	127	54%	460	72%	399	83%	286	60%	1,188	70%	1,026	83%	738	60%	

Table 4. by Gender

		Term of First English Enrollment																							
		Fall 2019						Spring 2020						Fall 2020						Total					
		# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year
Female	120AC	11	91%	8	73%	6	55%	2	100%	0	0%	0	0%	11	64%	6	55%	5	45%	24	79%	14	58%	11	46%
	120SL	10	80%	7	70%	5	50%	4	100%	1	25%	1	25%	8	63%	2	25%	2	25%	22	77%	10	45%	8	36%
	120	16	81%	9	56%	7	44%	8	63%	5	63%	4	50%	16	81%	6	38%	6	38%	40	78%	20	50%	17	43%
	150/C	6	67%	6	100%	6	100%	4	50%	4	100%	2	50%	1	0%	1	100%	0	0%	11	55%	11	100%	8	73%
	150/C-Puente	14	79%	14	100%	12	86%							9	89%	9	100%	8	89%	23	83%	23	100%	20	87%
	150	128	75%	128	100%	98	77%	71	75%	71	100%	52	73%	146	75%	146	100%	111	76%	345	75%	345	100%	261	76%
Male	120AC	9	67%	5	56%	4	44%	4	50%	2	50%	1	25%	8	63%	3	38%	2	25%	21	62%	10	48%	7	33%
	120SL	8	50%	4	50%	4	50%	4	25%	2	50%	1	25%	9	67%	7	78%	4	44%	21	52%	13	62%	9	43%
	120	25	52%	13	52%	7	28%	8	50%	3	38%	2	25%	15	67%	6	40%	4	27%	48	56%	22	46%	13	27%
	150/C	10	44%	10	100%	6	60%	14	64%	14	100%	9	64%	3	33%	3	100%	1	33%	27	54%	27	100%	16	59%
	150/C-Puente	8	50%	8	100%	6	75%							8	100%	8	100%	8	100%	16	75%	16	100%	14	88%
	150	145	73%	145	100%	108	74%	69	55%	69	100%	41	59%	136	72%	136	100%	100	74%	350	69%	350	100%	249	71%
Other or unr..	120AC	2	100%	2	100%	2	100%													2	100%	2	100%	2	100%
	150/C	1	100%	1	100%	1	100%													1	100%	1	100%	1	100%
	150/C-Puente													1	0%	1	100%	0	0%	1	0%	1	100%	0	0%
	150	4	50%	4	100%	4	100%	1	100%	1	100%	1	100%	1	100%	1	100%	1	100%	6	67%	6	100%	6	100%
Total	397	72%	364	92%	276	70%	189	64%	172	91%	114	60%	372	73%	335	90%	252	68%	958	71%	871	91%	642	67%	

Table 5. by Age Group

		Term of First English Enrollment																							
		Fall 2019						Spring 2020						Fall 2020						Total					
		# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year
19 and younger	120AC	13	77%	7	54%	7	54%	4	50%	1	25%	0	0%	13	62%	7	54%	5	38%	30	67%	15	50%	12	40%
	120SL	10	60%	7	70%	5	50%	2	50%	0	0%	0	0%	6	33%	3	50%	1	17%	18	50%	10	56%	6	33%
	120	21	52%	11	52%	7	33%	8	38%	3	38%	1	13%	25	68%	11	44%	9	36%	54	57%	25	46%	17	31%
	150/C	15	57%	15	100%	12	80%	10	40%	10	100%	4	40%	4	25%	4	100%	1	25%	29	46%	29	100%	17	59%
	150/C-Puente	21	71%	21	100%	17	81%							16	88%	16	100%	14	88%	37	78%	37	100%	31	84%
	150	188	76%	188	100%	145	77%	74	66%	74	100%	50	68%	197	76%	197	100%	153	78%	459	74%	459	100%	348	76%
20-29	120AC	6	100%	6	100%	4	67%	1	100%	0	0%	0	0%	5	60%	1	20%	1	20%	12	83%	7	58%	5	42%
	120SL	6	67%	3	50%	3	50%	5	60%	3	60%	2	40%	5	80%	2	40%	1	20%	16	69%	8	50%	6	38%
	120	11	91%	8	73%	4	36%	5	80%	4	80%	4	80%	4	100%	1	25%	1	25%	20	90%	13	65%	9	45%
	150/C	2	50%	2	100%	1	50%	8	88%	8	100%	7	88%							10	80%	10	100%	8	80%
	150/C-Puente	1	0%	1	100%	1	100%							2	100%	2	100%	2	100%	3	67%	3	100%	3	100%
	150	61	65%	61	100%	43	70%	50	71%	50	100%	36	72%	48	60%	48	100%	30	63%	159	65%	159	100%	109	69%
30-39	120AC	2	100%	2	100%	1	50%	1	100%	1	100%	1	100%	1	100%	1	100%	1	100%	4	100%	4	100%	3	75%
	120SL	2	100%	1	50%	1	50%	1	100%	0	0%	0	0%	4	75%	2	50%	2	50%	7	86%	3	43%	3	43%
	120	5	60%	2	40%	2	40%							1	100%	0	0%	0	0%	6	67%	2	33%	2	33%
	150	18	65%	18	100%	12	67%	12	33%	12	100%	4	33%	26	69%	26	100%	18	69%	56	60%	56	100%	34	61%
40-49	120SL													1	100%	1	100%	1	100%	1	100%	1	100%	1	100%
	120	2	50%	0	0%	0	0%	1	100%	0	0%	0	0%							3	67%	0	0%	0	0%
	150	6	100%	6	100%	6	100%	4	75%	4	100%	3	75%	6	100%	6	100%	5	83%	16	93%	16	100%	14	88%
50 or older	120AC	1	0%	0	0%	0	0%													1	0%	0	0%	0	0%
	120SL													1	100%	1	100%	1	100%	1	100%	1	100%	1	100%
	120	2	50%	1	50%	1	50%	2	50%	1	50%	1	50%	1	100%	0	0%	0	0%	5	60%	2	40%	2	40%
	150	4	100%	4	100%	4	100%	1	100%	1	100%	1	100%	6	100%	6	100%	6	100%	11	100%	11	100%	11	100%
Total	397	72%	364	92%	276	70%	189	64%	172	91%	114	60%	372	73%	335	90%	252	68%	958	71%	871	91%	642	67%	

Table 6. by SAS Status

		Term of First English Enrollment																							
		Fall 2019						Spring 2020						Fall 2020						Total					
		# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year	# enrolled	% success	# took transfer w/in 1 year	% took transfer w/in 1 year	# completed transfer w/in 1 year	% completed transfer w/in 1 year
SAS	120	3	33%	1	33%	1	33%	1	0%	0	0%	0	0%	5	100%	2	40%	1	20%	9	67%	3	33%	2	22%
	120AC	1	100%	1	100%	1	100%	1	100%	0	0%	0	0%	3	100%	2	67%	2	67%	5	100%	3	60%	3	60%
	120SL	2	50%	2	100%	1	50%	1	100%	0	0%	0	0%	3	67%	2	67%	1	33%	3	67%	2	67%	1	33%
	150	37	83%	37	100%	31	84%	15	57%	15	100%	8	53%	32	87%	32	100%	27	84%	84	80%	84	100%	66	79%
	150/C	4	33%	4	100%	2	50%	2	50%	2	100%	1	50%	6	40%	6	100%	3	50%	6	40%	6	100%	3	50%
	150/C-Puente	2	50%	2	100%	2	100%							2	50%	2	100%	2	100%	2	50%	2	100%	2	100%
Not SAS	120	38	66%	21	55%	13	34%	15	60%	8	53%	6	40%	26	69%	10	38%	9	35%	79	66%	39	49%	28	35%
	120AC	21	81%	14	67%	11	52%	5	60%	2	40%	1	20%	16	56%	7	44%	5	31%	42	69%	23	55%	17	40%
	120SL	16	69%	9	56%	8	50%	7	57%	3	43%	2	29%	17	65%	9	53%	6	35%	40	65%	21	53%	16	40%
	150	240	72%	240	100%	179	75%	126	66%	126	100%	86	68%	251	72%	251	100%	185	74%	617	71%	617	100%	450	73%
	150/C	13	62%	13	100%	11	85%	16	63%	16	100%	10	63%	4	25%	4	100%	1	25%	33	58%	33	100%	22	67%
	150/C-Puente	20	70%	20	100%	16	80%							18	89%	18	100%	16	89%	38	79%	38	100%	32	84%
Total	397	72%	364	92%	276	70%	189	64%	172	91%	114	60%	372	73%	335	90%	252	68%	958	71%	871	91%	642	67%	

Appendix A. Significance Tests: One-Year Throughput Rates by First English Course

. oneway CompletedTransfer1Year FirstCourse, tab bon

FirstCourse	Mean	Std. Dev.	Freq.
120	.34090909	.47673129	88
120AC	.42553191	.49976868	47
120SL	.39534884	.49471179	43
150	.7360913	.44106509	701
150/C	.64102564	.48597051	39
150/C-Pue..	.85	.36162029	40
Total	.67014614	.47040544	958

Source	SS	df	MS	F	Prob > F
Between groups	19.9737717	5	3.99475433	19.83	0.0000
Within groups	191.792408	952	.201462613		
Total	211.76618	957	.221281274		

Bartlett's test for equal variances: chi2(5) = 6.7008 Prob>chi2 = 0.244

Comparison of Completed~ar by FirstCourse (Bonferroni)

Row Mean - Col Mean	120	120AC	120SL	150	150/C
120AC	.084623	1.000			
120SL	.05444	-.030183	1.000		
150	.395182	.310559	.340742	1.000	
150/C	.300117	.215494	.245677	-.095066	1.000
150/C-..	.509091	.424468	.454651	.113909	.208974
	0.000	0.000	0.000	1.000	0.582

.

. bysort gpaband: oneway CompletedTransfer1Year FirstCourse, tab bon

-> gpaband = 1

FirstCourse	Mean	Std. Dev.	Freq.
120	.28571429	.46004371	28
120AC	.14285714	.36313652	14
120SL	0	0	5
150	.51851852	.50198636	108
150/C	.4	.50709255	15
150/C-Pue..	.77777778	.44095855	9
Total	.44134078	.49794002	179

Source	SS	df	MS	F	Prob > F
Between groups					
Within groups					
Total					

Between groups	4.58698827	5	.917397653	4.01	0.0018
Within groups	39.5470899	173	.228595896		

Total	44.1340782	178	.24794426		

Bartlett's test for equal variances: $\chi^2(4) = 2.3464$ Prob> $\chi^2 = 0.672$

note: Bartlett's test performed on cells with positive variance:
1 multiple-observation cells not used

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	-.142857 1.000				
120SL	-.285714 1.000	-.142857 1.000			
150	.232804 0.343	.375661 0.094	.518519 0.283		
150/C	.114286 1.000	.257143 1.000	.4 1.000	-.118519 1.000	
150/C-..	.492063 0.119	.634921 0.033	.777778 0.060	.259259 1.000	.377778 0.939

-> gpaband = 2

FirstCourse	Mean	Std. Dev.	Freq.
120	.39393939	.49619766	33
120AC	.52380952	.51176632	21
120SL	.5	.52223297	12
150	.77366255	.41889122	486
150/C	.82608696	.38755339	23
150/C-Pue..	.89655172	.30993405	29
Total	.74668874	.43526812	604

Source	Analysis of Variance			F	Prob > F
	SS	df	MS		
Between groups	7.02961071	5	1.40592214	7.84	0.0000
Within groups	107.213767	598	.179287235		

Total	114.243377	603	.189458337		

Bartlett's test for equal variances: $\chi^2(5) = 9.3036$ Prob> $\chi^2 = 0.098$

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	.12987 1.000				
120SL	.106061 1.000	-.02381 1.000			
150	.379723 0.000	.249853 0.125	.273663 0.410		
150/C	.432148 0.003	.302277 0.275	.326087 0.464	.052424 1.000	

```

150/C-.. | .502612 .372742 .396552 .122889 .070465
| 0.000 0.033 0.098 1.000 1.000

```

-> gpaband = 3

```

Summary of CompletedTransfer1Year
FirstCourse | Mean Std. Dev. Freq.
-----+-----
120 | .33333333 .48038446 27
120AC | .58333333 .51492865 12
120SL | .42307692 .50383147 26
150 | .78504673 .41272306 107
150/C | 0 0 1
150/C-Pue.. | .5 .70710678 2
-----+-----
Total | .64 .48137733 175

```

```

Analysis of Variance
Source SS df MS F Prob > F
-----+-----
Between groups 6.50110472 5 1.30022094 6.50 0.0000
Within groups 33.8188953 169 .200111806
-----+-----
Total 40.32 174 .231724138

```

Bartlett's test for equal variances: chi2(4) = 3.1068 Prob>chi2 = 0.540

note: Bartlett's test performed on cells with positive variance:
1 single-observation cells not used

```

Comparison of Completed~ar by FirstCourse
(Bonferroni)
Row Mean-|
Col Mean | 120 120AC 120SL 150 150/C
-----+-----
120AC | .25
| 1.000
120SL | .089744 -.160256
| 1.000 1.000
150 | .451713 .201713 .36197
| 0.000 1.000 0.004
150/C | -.333333 -.583333 -.423077 -.785047
| 1.000 1.000 1.000 1.000
150/C-.. | .166667 -.083333 .076923 -.285047 .5
| 1.000 1.000 1.000 1.000 1.000

```

. bysort race: oneway CompletedTransfer1Year FirstCourse, tab bon

-> race = American Indian or Alaska Native

```

Summary of CompletedTransfer1Year
FirstCourse | Mean Std. Dev. Freq.
-----+-----
150 | .75 .5 4
-----+-----
Total | .75 .5 4

```

```

Analysis of Variance
Source SS df MS F Prob > F
-----+-----

```

Between groups	0	0	.
Within groups	.75	3	.25

Total	.75	3	.25

Comparison of Completed~ar by FirstCourse
(Bonferroni)

-> race = Asian

FirstCourse	Mean	Std. Dev.	Freq.
120	.28571429	.48795004	7
120AC	.83333333	.40824829	6
120SL	.27272727	.46709937	11
150	.75757576	.43519414	33

Total	.61403509	.49114974	57

Source	Analysis of Variance			F	Prob > F
	SS	df	MS		
Between groups	3.00444293	3	1.00148098	5.05	0.0038
Within groups	10.504329	53	.198194887		

Total	13.5087719	56	.24122807		

Bartlett's test for equal variances: chi2(3) = 0.2454 Prob>chi2 = 0.970

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean-	Col Mean	120	120AC	120SL
120AC		.547619		
		0.188		
120SL		-.012987	-.560606	
		1.000	0.098	
150		.471861	-.075758	.484848
		0.083	1.000	0.017

-> race = Black or African American

FirstCourse	Mean	Std. Dev.	Freq.
120	1	0	1
120AC	.5	.70710678	2
120SL	1	0	1
150	.5	.51176632	22

Total	.53846154	.50839113	26

Source	Analysis of Variance			F	Prob > F
	SS	df	MS		
Between groups	.461538462	3	.153846154	0.56	0.6444
Within groups		6	.272727273		

Total	6.46153846	25	.258461538		

Bartlett's test for equal variances: chi2(1) = 0.1830 Prob>chi2 = 0.669

note: Bartlett's test performed on cells with positive variance:
2 single-observation cells not used

Comparison of Completed-ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL
120AC	-.5 1.000		
120SL	0 1.000	.5 1.000	
150	-.5 1.000	0 1.000	-.5 1.000

-> race = Hispanic

FirstCourse	Mean	Std. Dev.	Freq.
120	.32352941	.47485808	34
120AC	.31818182	.47673129	22
120SL	.42857143	.50709255	21
150	.66513761	.47302851	218
150/C	.42857143	.50709255	21
150/C-Pue..	.85	.36162029	40
Total	.60393258	.4897671	356

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	8.99983048	5	1.7999661	8.27	0.0000
Within groups	76.1546639	350	.217584754		
Total	85.1544944	355	.239871815		

Bartlett's test for equal variances: $\chi^2(5) = 4.9461$ Prob> $\chi^2 = 0.422$

Comparison of Completed-ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	-.005348 1.000				
120SL	.105042 1.000	.11039 1.000			
150	.341608 0.001	.346956 0.015	.236566 0.406		
150/C	.105042 1.000	.11039 1.000	0 1.000	-.236566 0.406	
150/C-..	.526471 0.000	.531818 0.000	.421429 0.013	.184862 0.327	.421429 0.013

-> race = Multi-Racial

FirstCourse	Mean	Std. Dev.	Freq.
120	0	0	6
120AC	.25	.5	4
120SL	1	0	1
150	.8	.40406102	50
150/C	1	0	3

Total | .703125 .46049275 64

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	4.609375	4	1.15234375	7.77	0.0000
Within groups	8.75	59	.148305085		
Total	13.359375	63	.212053571		

Bartlett's test for equal variances: chi2(1) = 0.2623 Prob>chi2 = 0.609

note: Bartlett's test performed on cells with positive variance:
 1 single-observation cells not used
 2 multiple-observation cells not used

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean-	Col Mean	120	120AC	120SL	150
120AC		.25			
		1.000			
120SL		1	.75		
		0.194	0.867		
150		.8	.55	-.2	
		0.000	0.079	1.000	
150/C		1	.75	0	.2
		0.005	0.134	1.000	1.000

-> race = Native Hawaiian or Other Pacific Islan..

Summary of CompletedTransfer1Year

FirstCourse	Mean	Std. Dev.	Freq.
150	.5	.70710678	2
Total	.5	.70710678	2

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	0	0			
Within groups	.5	1	.5		
Total	.5	1	.5		

Comparison of Completed~ar by FirstCourse
(Bonferroni)

-> race = None/Unknown

Summary of CompletedTransfer1Year

FirstCourse	Mean	Std. Dev.	Freq.
120	.5	.57735027	4
120AC	1	0	1
120SL	.4	.54772256	5
150	.66666667	.4794633	30
150/C	1	0	1
Total	.63414634	.48765242	41

Analysis of Variance					
Source	SS	df	MS	F	Prob > F

Between groups	.645528455	4	.161382114	0.66	0.6270
Within groups	8.86666667	36	.246296296		

Total	9.51219512	40	.237804878		

Bartlett's test for equal variances: $\chi^2(2) = 0.2758$ Prob> $\chi^2 = 0.871$

note: Bartlett's test performed on cells with positive variance:
2 single-observation cells not used

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean-	Col Mean	120	120AC	120SL	150

120AC		.5			
		1.000			
120SL		-.1	-.6		
		1.000	1.000		
150		.166667	-.333333	.266667	
		1.000	1.000	1.000	
150/C		.5	0	.6	.333333
		1.000	1.000	1.000	1.000

-> race = White

FirstCourse	Summary of CompletedTransfer1Year		
	Mean	Std. Dev.	Freq.

120	.38888889	.49441323	36
120AC	.41666667	.51492865	12
120SL	.25	.5	4
150	.79239766	.40618472	342
150/C	.85714286	.36313652	14

Total	.74264706	.43771223	408

Source	Analysis of Variance				
	SS	df	MS	F	Prob > F

Between groups	7.78119932	4	1.94529983	11.17	0.0000
Within groups	70.1967419	403	.174185464		

Total	77.9779412	407	.191591993		

Bartlett's test for equal variances: $\chi^2(4) = 4.3617$ Prob> $\chi^2 = 0.359$

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean-	Col Mean	120	120AC	120SL	150

120AC		.027778			
		1.000			
120SL		-.138889	-.166667		
		1.000	1.000		
150		.403509	.375731	.542398	
		0.000	0.023	0.101	
150/C		.468254	.440476	.607143	.064745
		0.004	0.076	0.107	1.000

. (Bonferroni)
Row Mean-|

Col Mean	120	120AC	120SL	150	150/C
120AC	.25	1.000			
120SL	.089744	-.160256	1.000		
150	.451713	.201713	.36197	1.000	
150/C	-.333333	-.583333	-.423077	-.785047	1.000
150/C-..	.166667	-.083333	.076923	-.285047	.5
	1.000	1.000	1.000	1.000	1.000

. bysort spbpers_sex: oneway CompletedTransfer1Year FirstCourse, tab bon

-> spbpers_sex =
no observations

-> spbpers_sex = F

FirstCourse	Mean	Std. Dev.	Freq.
120	.425	.50064062	40
120AC	.45833333	.50897738	24
120SL	.36363636	.49236596	22
150	.75652174	.42980467	345
150/C	.72727273	.46709937	11
150/C-Pue..	.86956522	.34435022	23
Total	.69892473	.45921941	465

Source	Analysis of Variance			F	Prob > F
	SS	df	MS		
Between groups	8.68688002	5	1.737376	8.94	0.0000
Within groups	89.1625823	459	.194253992		
Total	97.8494624	464	.210882462		

Bartlett's test for equal variances: chi2(5) = 5.6750 Prob>chi2 = 0.339

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean-	Col Mean	120	120AC	120SL	150	150/C
120AC	.033333	1.000				
120SL	-.061364	-.094697	1.000			
150	.331522	.298188	.392885	1.000		
150/C	.302273	.268939	.363636	-.029249	1.000	
150/C-..	.444565	.411232	.505929	.113043	.142292	1.000
	0.002	0.022	0.002	1.000	1.000	

-> spbpers_sex = M

FirstCourse	Mean	Std. Dev.	Freq.
120	.27083333	.44909286	48
120AC	.33333333	.48304589	21
120SL	.42857143	.50709255	21
150	.71142857	.45374685	350
150/C	.59259259	.50071174	27
150/C-Pue..	.875	.34156503	16
Total	.63768116	.48116862	483

Source	SS	df	MS	F	Prob > F
Between groups	12.1827082	5	2.43654164	11.69	0.0000
Within groups	99.4114947	477	.208409842		
Total	111.594203	482	.231523243		

Bartlett's test for equal variances: chi2(5) = 3.1816 Prob>chi2 = 0.672

Row Mean-	120	120AC	120SL	150	150/C
120AC	.0625	1.000			
120SL	.157738	.095238	1.000		
150	.440595	.378095	.282857	1.000	
150/C	.321759	.259259	.164021	-.118836	1.000
150/C-..	.604167	.541667	.446429	.163571	.282407

-> spbpers_sex = N

FirstCourse	Mean	Std. Dev.	Freq.
120AC	1	0	2
150	1	0	6
150/C	1	0	1
150/C-Pue..	0	0	1
Total	.9	.31622777	10

Source	SS	df	MS	F	Prob > F
Between groups	.9	3	.3		
Within groups	0	6	0		
Total	.9	9	.1		

Row Mean-	120AC	150	150/C
120AC			
150			
150/C			

```

150 |      0
    |      .
150/C |      0      0
    |      .      .
150/C-.. |     -1     -1     -1
    |      .      .      .

```

```
. bysort agegroup2: oneway CompletedTransfer1Year FirstCourse, tab bon
```

```
-----
-> agegroup2 = 19 and younger
```

FirstCourse	Mean	Std. Dev.	Freq.
120	.31481481	.46880314	54
120AC	.4	.49827288	30
120SL	.33333333	.48507125	18
150	.75816993	.42865908	459
150/C	.5862069	.50123001	29
150/C-Pue..	.83783784	.37368388	37
Total	.68740032	.46392282	627

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	15.6639418	5	3.13278837	16.34	0.0000
Within groups	119.066521	621	.191733528		
Total	134.730463	626	.215224381		

```
Bartlett's test for equal variances: chi2(5) = 5.0592 Prob>chi2 = 0.409
```

Comparison of Completed-ar by FirstCourse (Bonferroni)					
Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	.085185	1.000			
120SL	.018519	-.066667	1.000		
150	.443355	.35817	.424837	1.000	
150/C	.271392	.186207	.252874	-.171963	1.000
150/C-..	.523023	.437838	.504505	.079668	.251631
	0.000	0.001	0.001	1.000	0.312

```
-----
-> agegroup2 = 20-29
```

FirstCourse	Mean	Std. Dev.	Freq.
120	.45	.51041779	20
120AC	.41666667	.51492865	12
120SL	.375	.5	16
150	.68553459	.46576961	159
150/C	.8	.42163702	10
150/C-Pue..	1	0	3

```
-----+-----
Total | .63636364 .48214272 220
```

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	3.41569468	5	.683138937	3.08	0.0105
Within groups	47.4933962	214	.221931758		
Total	50.9090909	219	.232461602		

Bartlett's test for equal variances: chi2(4) = 0.7699 Prob>chi2 = 0.942

note: Bartlett's test performed on cells with positive variance:
1 multiple-observation cells not used

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	-.033333				
	1.000				
120SL	-.075	-.041667			
	1.000	1.000			
150	.235535	.268868	.310535		
	0.544	0.869	0.190		
150/C	.35	.383333	.425	.114465	
	0.846	0.881	0.394	1.000	
150/C-..	.55	.583333	.625	.314465	.2
	0.910	0.846	0.542	1.000	1.000

-> agegroup2 = 30-39

FirstCourse	Summary of CompletedTransfer1Year		
	Mean	Std. Dev.	Freq.
120	.33333333	.51639778	6
120AC	.75	.5	4
120SL	.42857143	.53452248	7
150	.60714286	.49280538	56
Total	.57534247	.49771166	73

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	.680854534	3	.226951511	0.91	0.4394
Within groups	17.1547619	69	.248619738		
Total	17.8356164	72	.247716895		

Bartlett's test for equal variances: chi2(3) = 0.0820 Prob>chi2 = 0.994

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL
120AC	.416667		
	1.000		
120SL	.095238	-.321429	
	1.000	1.000	
150	.27381	-.142857	.178571

| 1.000 1.000 1.000

 -> agegroup2 = 40-49

FirstCourse	Mean	Std. Dev.	Freq.
120	0	0	3
120SL	1	0	1
150	.875	.34156503	16
Total	.75	.44426166	20

Source	SS	df	MS	F	Prob > F
Between groups	2	2	1	9.71	0.0015
Within groups	1.75	17	.102941176		
Total	3.75	19	.197368421		

Comparison of Completed~ar by FirstCourse
 (Bonferroni)

Row Mean-	Col Mean		
120SL	120	120SL	
150	.875	-.125	
	0.001	1.000	

 -> agegroup2 = 50-59

FirstCourse	Mean	Std. Dev.	Freq.
120	.4	.54772256	5
120AC	0	0	1
120SL	1	0	1
150	1	0	11
Total	.77777778	.42779263	18

Source	SS	df	MS	F	Prob > F
Between groups	1.91111111	3	.637037037	7.43	0.0032
Within groups	1.2	14	.085714286		
Total	3.11111111	17	.183006536		

Comparison of Completed~ar by FirstCourse
 (Bonferroni)

Row Mean-	Col Mean		
120AC	120	120AC	120SL
120SL	.6	1	
	0.495	0.180	
150	.6	1	0
	0.012	0.033	1.000

 -> agegroup2 = Unknown
 no observations

```
-----
-> agegroup2 = .
no observations
```

```
.
. bysort dsps: oneway CompletedTransfer1Year FirstCourse, tab bon
```

```
-----
-> dsps = 0
```

FirstCourse	Mean	Std. Dev.	Freq.
120	.35443038	.48139686	79
120AC	.4047619	.49679577	42
120SL	.4	.49613894	40
150	.72933549	.44466357	617
150/C	.66666667	.47871355	33
150/C-Pue..	.84210526	.36953702	38
Total	.66548881	.47209742	849

Analysis of Variance					
Source	SS	df	MS	F	Prob > F
Between groups	17.0188327	5	3.40376654	16.68	0.0000
Within groups	171.979989	843	.204009477		
Total	188.998822	848	.22287597		

Bartlett's test for equal variances: $\chi^2(5) = 5.2869$ Prob> $\chi^2 = 0.382$

Comparison of Completed~ar by FirstCourse (Bonferroni)					
Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	.050332 1.000				
120SL	.04557 1.000	-.004762 1.000			
150	.374905 0.000	.324574 0.000	.329335 0.000		
150/C	.312236 0.013	.261905 0.193	.266667 0.184	-.062669 1.000	
150/C-..	.487675 0.000	.437343 0.000	.442105 0.000	.11277 1.000	.175439 1.000

```
-----
-> dsps = 1
```

FirstCourse	Mean	Std. Dev.	Freq.
120	.22222222	.44095855	9
120AC	.6	.54772256	5
120SL	.33333333	.57735027	3
150	.78571429	.41279035	84
150/C	.5	.54772256	6
150/C-Pue..	1	0	2
Total	.70642202	.45750435	109

Analysis of Variance					
Source	SS	df	MS	F	Prob > F

Between groups	3.54042522	5	.708085044	3.83	0.0032
Within groups	19.0650794	103	.185097858		
Total	22.6055046	108	.209310228		

Bartlett's test for equal variances: $\chi^2(4) = 1.7871$ Prob> $\chi^2 = 0.775$

note: Bartlett's test performed on cells with positive variance:
1 multiple-observation cells not used

Comparison of Completed~ar by FirstCourse
(Bonferroni)

Row Mean- Col Mean	120	120AC	120SL	150	150/C
120AC	.377778 1.000				
120SL	.111111 1.000	-.266667 1.000			
150	.563492 0.005	.185714 1.000	.452381 1.000		
150/C	.277778 1.000	-.1 1.000	.166667 1.000	-.285714 1.000	
150/C-..	.777778 0.341	.4 1.000	.666667 1.000	.214286 1.000	.5 1.000