

## RETENTION OUTCOMES REPORT

Prepared by the SCCC Office of Institutional Research

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Status as of Fall 2005.

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Student Data File, State University of New York, Office of Institutional Research

History File, Suffolk County Community College, Computer Center.

## RETENTION-OUTCOMES REPORT SUMMARY

This report presents retention and/or graduation outcomes for various SCCC cohorts.

The following report contains five parts. Each part examines some aspect of the persistence and/or graduation outcome of different entering student cohorts:

Part 1 -- Persistence and graduation status, as of Fall 2005, of students who were first-time full-time students in Fall 2002

Part 2 -- Persistence and graduation status, as of Fall 2005, of (matriculated) students who were first-time part-time in Fall 2000

Part 3 -- Number of years to graduate, through Fall 2005, for students who were first-time (both full-time and part-time matriculated) in Fall 1995

Part 4 -- For students who were first-time full-time in Fall 1994 through Fall 2004, the percentage graduating (through Spring 2006) after a specified number of years

Part 5 -- First fall-to-next spring persistence and first fall-to-next fall persistence of students who were first-time full-time in Fall 1995 through Fall 2004.

Two cohorts of particular interest in this report are the cohorts comprised of all first-time full-time students who entered in the Fall of 2002 (Part 1) and the cohort comprised of all first-time part-time matriculated students who entered in the Fall of 2000 (Part 2). These cohorts were tracked for 3 and 5 years, respectively, at which time each student's SCCC enrollment/graduation status was evaluated. Graduation/enrollment status consisted of three categories: SCCC graduate (graduate), attending SCCC as of Fall 2005 (attending and not graduated) and, not an SCCC graduate and not attending SCCC as of Fall 2005 (not attending). Cohort outcomes were examined by three categories of student characteristics/statuses: demographic characteristics (i.e., gender, ethnicity, and age), SCCC status (i.e., home campus, program enrollment type, and original curriculum), and

student-academic status (i.e., developmental placement and number of developmental placements.)

Part 1- Fall 2002 first-time full-time cohort: Examination of student outcomes at the end of three years revealed that graduation/enrollment rates for the total full-time cohort were: **graduate 21%, attending 20%, and not attending 60%**. However, enrollment outcomes varied significantly by category for the student characteristics/statuses under review. The following presents the category (e.g., women) for the student characteristic/status (e.g., gender) with the highest proportion of graduates relative to the other category(ies) present:

Gender – women (24%)

Ethnicity – White non-Hispanic (23%)

Age category –age 19 & below (22%)

Campus – Ammerman (22%)

Program type – Transfer (21%)

\*Non-developmental student (25%)

Student requiring no developmental coursework (30%).

Part 2- Fall 2000 first-time part-time cohort: Graduation/enrollment rates for the total part-time cohort were: **graduate 12%, attending 9%, and not attending 79%**.

Enrollment outcomes did not vary by the following student characteristics/statuses under review: ethnicity, age category, campus, and program type (i.e., rates were similar to those found above.) Enrollment outcomes, however, did vary significantly by the

following student characteristics/statuses under review: gender, developmental placement, and number of developmental courses required. A higher proportion of graduates were found in each of the following categories relative to the other category (ies) present:

Gender – women (15%)

Non-developmental student (14%)

Student requiring no developmental coursework (18%).

Part 3 – SCCC Graduates from the Fall 1995 first-time full-time and part-time entering cohorts. SCCC graduates from the first-time Fall 1995 cohort were tracked through Fall 2005 with respect to the number of years required to complete a SCCC degree. Of the students who graduated within 10 years (i.e., both initial full-time and part-time students), the largest proportion required 3 years to graduate (Full-time-40.8%, Part-time-36.1%)

Part 4- Fall 1995 – Fall 2004 first-time full-time entering cohorts: This study examined the percentage of entering students graduating after a specified number of years. Ten separate entering cohorts were examined. Across the ten years since 1994, on average, 6.5% of the students graduated in two years. After a third year, the cumulative average increased from 6.5% to 21.9%, after 4 years to 31.8%, and to 35.8% at the end of ten years or more.

Part 5- Fall 1995 – Fall 2004 first-time full-time entering cohorts: Further examination of the cohorts identified in Part 4 was conducted. This section provides persistence data by

gender on first-time Fall 1995 through Fall 2004 cohorts. Persistence data are reported on both a semester-to-semester (i.e., First Fall-to-Next Spring) level and year-to-year (i.e., First Fall-to- Next Fall) level. The average persistence rate from Fall to Spring semesters was 81.3%. The average persistence rate from year to year dropped to 65 %. In both instances, females had a higher persistence rate than males (semester to semester persistence – 83.4% of the women vs. 79.0% of the men, year to year persistence – 67.8% of the women vs. 61.9% of the men.)

**Part 1 – Persistence and Graduation Status, as of Fall 2005, of Students Who Were First-Time Full-Time Students in Fall 2002**

This section reports a study of the persistence of a cohort that includes all students who were first-time full-time in Fall 2002. Persistence is tracked three years post-entry, through Fall 2005. (The three-year tracking period follows conventional (and SUNY) guidelines.) The goals of the study are to:

1. Describe the attendance and graduation rates for the total cohort and for various subcohorts (by gender, ethnicity, age, campus, placement, and program).
2. Analyze the persistence and graduation rates to better understand group differences.
3. Present persistence and graduation rates by campus and curriculum for further study.

### Description of Cohort

The Fall 2002 first-time full-time cohort consisted of 3446 students, 1751 (51%) female and 1695 (49%) male. Ethnically, 2684 (78%) were White non-Hispanic, 268 (8%) Black non-Hispanic, 377 (11%) Hispanic, 90 (3%) Asian/Pacific Islander, and 9 (less than 1%) Native American/Alaskan. The age of this cohort ranged from 15 to 58 years; 2842 (83%) were 19 or younger, 354 (10%) 20-22 years old, 147 (4.3%) 23-30 years old, and 103 (3%) 31 or older. Based on placement testing, 1000 (29%) students were developmental (required coursework in two or more basic skills areas) and 2446 (71%) non-developmental; 1526 (44%) required no developmental coursework, 672 (20%) one developmental course, 515 (15%) two developmental courses, 323 (9%) three, 213 (6%) four, 130 (5%) five, and 51 (2%) six developmental courses. There were 695 students (20%) enrolled in career programs and 2751 (80%) in transfer programs. Two thousand of the students (58%) identified the Ammerman Campus as their home campus, 414 (12%) the Eastern Campus, and 1032 (30%) the Grant Campus. Within the first-time full-time cohort, as of Fall 2005, 708 (21%) of the students had graduated, 675 (20%) were still enrolled, and 2063 (60%) were not attending.

## Results

### First-Time Full-Time Students Entering in 2002, Status as of Fall 2005

An examination of graduation and persistence rates for the cohort by gender revealed that a significantly higher proportion of female students than male students in the cohort graduated (23.9% of females vs. 17.1% of males). At the same time, a higher proportion of male students were lost to attrition (65.5% of males vs. 54.4% of females). Proportions of male and female students similar to those for graduation remain enrolled. See Table 1.

Table 1. Graduation & Persistence by Gender, Fall 2002 First-Time Full-Time Students, Status as of Fall 2005.

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Male	295	17.4%	1110	65.5%	290	17.1%	1695
Female	380	21.7%	953	54.4%	418	23.9%	1751
Total	675	19.6%	2063	59.9%	708	20.5%	3446

$$\chi^2(2, N = 3446) = 44.895, p < .0001$$

Analysis of graduation and persistence rates by ethnic group among students in the cohort revealed significant differences across ethnic groups. White non-Hispanic students and Asian/Pacific Islander students graduated at the highest rate (22.8% and 22.2%, respectively). Hispanic and Black non-Hispanic students graduated at lower rates (13% and 9%, respectively). Significant differences in attrition rates were also found across ethnic groups. Attrition among was highest (75.7%) among Black non-Hispanic, next highest among Hispanic students, then White non-Hispanic students, and Asian/Pacific Islander students (64.7%, 57.6%, and 54.4%, respectively). Asian or Pacific Islander students within the 2002 cohort have the highest rate of persistence (23.3%). There were too few American Indian/Alaskan students in each category to be included in the analysis. See Table 2.

Table 2. Graduation & Persistence by Ethnic Background, Fall 2002 First-Time Full-Time Students, Status as of Fall 2005

	Attending		Not Attending		Graduate		Total Count
	Count	Row %	Count	Row %	Count	Row %	
White non-Hispanic	525	19.6%	1547	57.6%	612	22.8%	2684
Black non-Hispanic	41	15.3%	203	75.7%	24	9.0%	268
Hispanic	84	22.3%	244	64.7%	49	13.0%	377
Asian or Pacific Islander	21	23.3%	49	54.4%	20	22.2%	90
American Indian or Native Alaskan	1	11.1%	7	77.8%	1	11.1%	9
Non-resident Alien	3	16.7%	13	72.2%	2	11.1%	18
<b>Total</b>	<b>675</b>	<b>19.6%</b>	<b>2063</b>	<b>59.9%</b>	<b>708</b>	<b>20.5%</b>	<b>3446</b>

$$\chi^2(2, N = 3446) = 57.271, p < .0001$$



An analysis of graduation and persistence rates across the three SCCC campuses shows differences in campus graduation rates among students in the cohort. The Ammerman Campus had the highest rate of graduation (22%), followed by the Eastern and Grant Campuses (18.8% and 18.5%, respectively). Differences in attrition were found among the campuses. The Grant Campus had a significantly higher rate of attrition (63.9%) than the Ammerman Campus (57.6%). Persistence rates for the Ammerman, Eastern and Grant Campuses were similar (20.5%, 20.0%, and 17.6%, respectively).

Table 3. Graduation & Persistence by Campus, Fall 2002 First-Time Full-Time Students, Status as of Fall 2005

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Ammerman	410	20.5%	1151	57.6%	439	22.0%	2000
Eastern	83	20.0%	253	61.1%	78	18.8%	414
Western	182	17.6%	659	63.9%	191	18.5%	1032
Total	675	19.6%	2063	59.9%	708	20.5%	3446

$$\chi^2(2, N = 3446) = 12.138, p = .016$$

An investigation of graduation and persistence rates by age category revealed significant differences within the cohort. Students age 19 or below graduated in higher proportion (21.8%) than older students in the full-time cohort. Age related differences in attrition rates were also found. Students age 19 or below dropped out in a lower proportion (57.4%) than all other students (20-22 years, 70.9%; 23-30 years, 74.8%; and 31 and above, 69.9%). Further, students age 19 or below persisted in a higher proportion (20.8%) than all other students (20-22 years, 13.3%; 23-30 years, 12.9%; and 31 and above, 16.5%).

Table 4. Graduation & Persistence by Age, Fall 2002 First-Time Full-Time Students, Status as of Fall 2005

	Attending		Not Attending		Graduate		Total Count
	Count	Row %	Count	Row %	Count	Row %	
19 & Below	592	20.8%	1630	57.4%	620	21.8%	2842
20 - 22 yrs	47	13.3%	251	70.9%	56	15.8%	354
23 - 30 yrs	19	12.9%	110	74.8%	18	12.2%	147
31 & Above	17	16.5%	72	69.9%	14	13.6%	103
<b>Total</b>	<b>675</b>	<b>19.6%</b>	<b>2063</b>	<b>59.9%</b>	<b>708</b>	<b>20.5%</b>	<b>3446</b>

$$\chi^2(2, N = 3446) = 44.135, p < .0001$$

An examination of graduation and persistence rates by developmental placement for the cohort revealed that a significantly higher proportion of non-developmental students than developmental students graduated (24.9% of non-developmental vs. 9.8% of developmental). At the same time, a higher proportion of developmental students than non-developmental students were no longer attending (67.1% of developmental vs. 56.9% of non-developmental). A higher proportion of developmental students (23.1%) than non-developmental students (18.2%) remained enrolled. See Table 5.

Table 5. Graduation & Persistence by Developmental Placement, Fall 2002  
First-Time Full-Time Students, Status as of Fall 2005

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Developmental	231	23.1%	671	67.1%	98	9.8%	1000
Non-Developmental	444	18.2%	1392	56.9%	610	24.9%	2446
Total	675	19.6%	2063	59.9%	708	20.5%	3446

Note. Students classified as developmental require coursework in two or more basic skill areas.

$\chi^2(2, N = 3446) = 100.362, p < .0001$

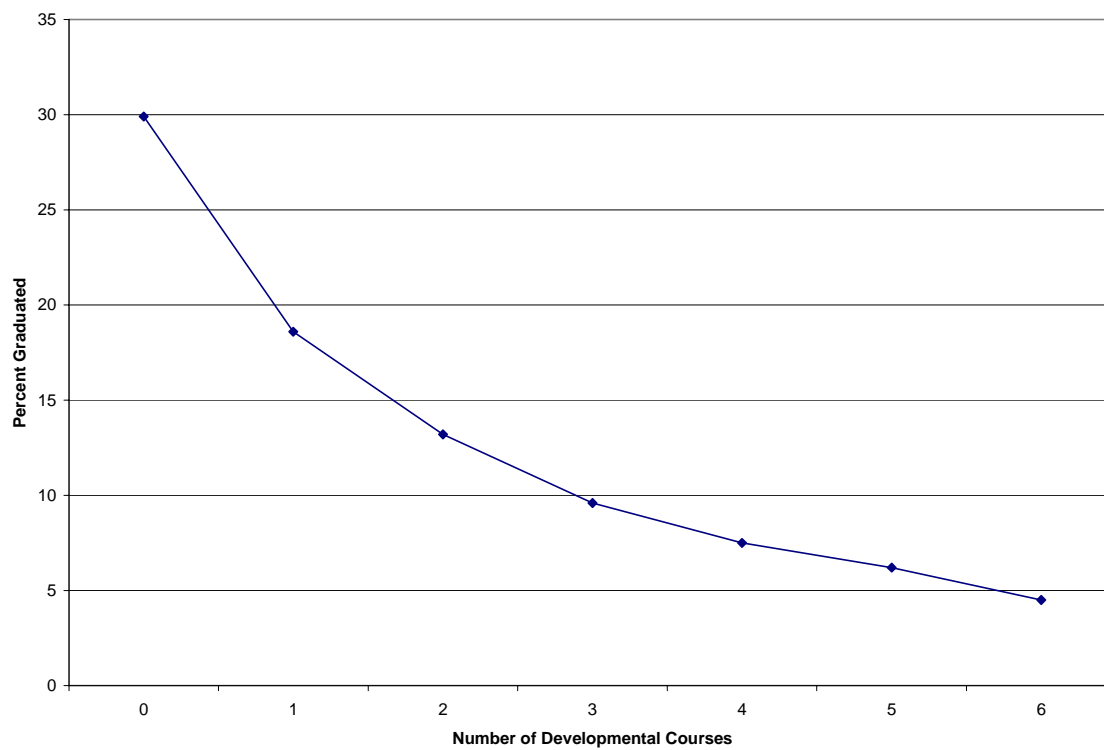
The number of developmental courses required of students in the cohort was analyzed and found to be significantly related to graduation rates. As the number of developmental courses increased, the rate of graduation decreased (Mantel-Haenszel  $\chi^2$  (1, N = 3446) = 107.3,  $p < .001$ ). That is, 29.9% of students requiring no developmental courses graduated; whereas, 18.6% of the student who required one developmental course graduated. This rate decreased exponentially with increasing developmental course requirements. The graduation rate for the subcohort of students requiring full developmental coursework (i.e., six developmental courses) was a mere 4.5%. (See Figure 1.) Attrition rates showed the reverse trend, with students requiring no developmental courses dropping out in the lowest proportion (54.0%), lower than among those who required any number of developmental courses. Table 6 provides graduation and persistence outcomes by number of developmental courses required.

Table 6. Graduation & Persistence by Number of Developmental Courses Required, Fall 2002 First-Time Full-Time Students, Status as of Fall 2005.

		Attending		Not Attending		Graduate		Total Count
		Count	Row %	Count	Row %	Count	Row %	
NUMBER OF	<b>0</b>	245	16.1%	824	54.0%	457	29.9%	1526
DEVELOPMENTAL	<b>1</b>	149	22.2%	398	59.2%	125	18.6%	672
COURSES	<b>2</b>	108	21.0%	339	65.8%	68	13.2%	515
REQUIRED	<b>3</b>	75	23.2%	217	67.2%	31	9.6%	323
	<b>4</b>	53	24.9%	144	67.6%	16	7.5%	213
	<b>5</b>	30	23.1%	92	70.8%	8	6.2%	130
	<b>6</b>	15	22.4%	49	73.1%	3	4.5%	67
Total		675	19.6%	2063	59.9%	708	20.5%	3446

$$\chi^2(2, N = 3446) = 178.653, p < .0001$$

Figure 1. Graduation by Number of Developmental Courses Required, Fall 2002  
First-Time Full-Time Students, Status as of Fall 2005.



An analysis of the graduation rate for Transfer, Career and Certificate program students revealed that a significantly lower proportion of students in the Certificate Program graduated (9.5%) or persisted (7.9%), as compared to students in the Transfer or Career programs. Conversely, students in the Certificate programs dropped out at significantly higher proportion (82.5%), than students in either the Transfer or Career programs. See Table 7.

Table 7. Graduation & Persistence by Career and Transfer Program, Fall 2002 First-Time Full-Time Students, Status as of Fall 2005.

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	
Transfer Program	557	20.2%	1617	58.8%	577	21.0%	2751
Career Program	113	17.9%	394	62.3%	125	19.8%	632
Certificate/Other	5	7.9%	52	82.5%	6	9.5%	63
Total	675	19.6%	2063	59.9%	708	20.5%	3446

$$\chi^2(4, N = 3446) = 16.671, p = .002$$

Table 8 provides the SCCC Outcome for all students who were first-time full-time in Fall 2002 by student's original curriculum code.

Table 8. Graduation and Persistence by Original Curriculum Fall 2002 First-Time Full-Time Students

Curriculum Code	SCCC Outcome							
	Attending		Not Attending		Program Graduate		Other Graduate	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
100	7	31.8	7	31.8	4	18.2	4	18.2
101	24	21.6	59	53.2	9	8.1	19	17.1
102	1	14.3	3	42.9	0	-	3	42.9
103	409	20.5	1235	61.9	268	13.4	84	4.2
110	1	11.1	7	77.8	0	-	1	11.1
111	1	6.3	9	56.3	3	18.8	3	18.8
112	17	14.4	43	36.4	43	36.4	15	12.7
115	0	-	1	50.0	1	50.0	0	-
116	0	-	1	50.0	1	50.0	0	-
200	14	26.4	26	49.1	4	7.5	9	17.0
201	0	-	2	66.7	0	-	1	33.3
203	10	27.0	16	43.2	4	10.8	7	18.9
204	4	21.1	10	52.6	5	26.3	0	-
205	3	25.0	6	50.0	1	8.3	2	16.7
206	4	23.5	6	35.3	2	11.8	5	29.4
207	23	26.1	46	52.3	9	10.2	10	11.4
208	6	19.4	15	48.4	7	22.6	3	9.7
210	2	16.7	5	41.7	2	16.7	3	25.0
211	30	15.4	120	61.5	41	21.0	4	2.1
212	1	100.0	0	-	0	-	0	-

continued



Table 8. Graduation and Persistence by Original Curriculum Fall 2002 First-Time Full-Time Students.

Curriculum Code	SCCC Outcome							
	Attending		Not Attending		Program Graduate		Other Graduate	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
301	0	-	8	80.0	1	10.0	1	10.0
302	2	22.2	4	44.4	2	22.2	1	11.1
306	6	17.6	24	70.6	4	11.8	0	-
308	0	-	1	50.0	1	50.0	0	-
315	30	18.5	109	67.3	14	8.6	9	5.6
318	1	16.7	5	83.3	0	-	0	-
319	0	-	12	100.0	0	-	0	-
320	0	-	2	66.7	1	33.3	0	-
329	4	30.8	6	46.2	2	15.4	1	7.7
330	16	18.2	50	56.8	5	5.7	17	19.3
333	3	20.0	8	53.3	1	6.7	3	20.0
334	5	33.3	7	46.7	2	13.3	1	6.7
335	5	18.5	17	63.0	2	7.4	3	11.1
343	2	25.0	4	50.0	0	-	2	25.0
349	0	-	0	-	1	100.0	0	-
364	2	9.5	13	61.9	3	14.3	3	14.3
365	7	17.1	25	61.0	9	22.0	0	-

continued

Table 8. Graduation and Persistence by Original Curriculum Fall 2002 First-Time Full-Time Students.

Curriculum Code	SCCC Outcome							
	Attending		Not Attending		Program Graduate		Other Graduate	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
367	2	33.3	3	50.0	1	16.7	0	-
369	2	6.1	22	66.7	7	21.2	2	6.1
370	0	-	1	100.0	0	-	0	-
372	7	46.7	4	26.7	2	13.3	2	13.3
388	2	33.3	3	50.0	1	16.7	0	-
389	0	-	5	83.3	1	16.7	0	-
390	0	-	3	60.0	2	40.0	0	-
391	0	-	1	50.0	1	50.0	0	-
392	15	19.7	46	60.5	7	9.2	8	10.5
394	2	13.3	11	73.3	2	13.3	0	-
401	0	-	2	100.0	0	-	0	-
402	0	-	2	66.7	1	33.3	0	-
407	0	-	3	100.0	0	-	0	-
410	4	23.5	8	47.1	2	11.8	3	17.6
431	0	-	31	100.0	0	-	0	-
440	0	-	2	100.0	0	-	0	-
500	1	20.0	4	80.0	0	-	0	-

**Part 2 – Persistence and Graduation status, as of fall 2005, of Students Who Were  
Matriculated First-Time Part-Time Students in Fall 2000**

This section examines the persistence and graduation of a cohort of all matriculated first-time part-time students in Fall 2000. Persistence is tracked five years post-entry, through fall 2005 (again this follows conventional (and SUNY) guidelines.) As is Part 1, the goals of the study are to:

1. Describe the attendance and graduation rates for the total cohort and various subcohorts (by gender, ethnicity, age, campus, placement, and program).
2. Analyze the persistence and graduation rates to better understand group differences.
3. Present persistence and graduation rates by campus and curriculum for further study.

This cohort consisted of 898 students, 552 (62%) female and 346 (39%) male. Ethnically, 666 (74%) were White non-Hispanic, 93 (10%) Black non-Hispanic, 118 (13%) Hispanic, 15 (2%) Asian/Pacific Islander, and 6 (1%) Native American/Alaskan. The age of this cohort ranged from 16 to 61 years; 373 (42%) were 19 or younger, 197 (22%) 20-22 years old, 179 (20%) 23-30 years old, and 149 (17%) 31 or older. Based on placement testing, 311 (35%) students were developmental and 587 (65%) non-developmental; 300 (33%) required no developmental coursework, 169 (19%) one developmental course, 185 (21%) two developmental courses, 114 (13%) three, 63 (7%) four, 51 (6%) five, and 16 (2%) six developmental courses. The Career Program accounted for 217 (24%) of the 898 students, and the Transfer Program for another 681 (76%) of the 898 students. Among the three SCCC campuses, 440 students (49%) identified as their home campus the

Ammerman Campus, 134 (15%) the Eastern Campus, and 324 (36%) the Grant Campus.

Within the part-time matriculated cohort 107 (12%) of the students had graduated, 84

(9%) were still enrolled, and 707 (79%) were not attending, as of Fall 2005 semester.

## Results

### First-Time Part-Time Matriculated Students Entering in 2000, Status as of Fall 2005

An examination of graduation and persistence rates by gender revealed significant gender differences across all three outcomes. A higher proportion of female students than male students in the cohort graduated (14.5% of females vs. 7.8% of males) or remained enrolled at SCCC (10.9% of females vs. 6.9% of males). Conversely, a higher proportion of male students were lost to attrition than female students (85.3% of males vs. 74.6% of females). See Table 9.

Table 9. Graduation & Persistence by Gender, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005.

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Male	24	6.9	295	85.3	27	7.8	346
Female	60	10.9	412	74.6	80	14.5	552
Total	84	9.4	707	78.7	107	11.9	898

$$\chi^2(2, N = 898) = 14.553, p = .001$$

There were no significant differences in attrition rates across ethnic groups. There were too few American Indian/ Native Alaskan students to be included in the analyses. See Table 10.

Table 10. Graduation & Persistence by Ethnic Background, Fall 2000  
First-Time Part-Time Matriculated Students, Status as of Fall 2005

	Attending		Not Attending		Graduate		Total
	Count	Row	Count	Row	Count	Row	Count
		%		%		%	
White non-Hispanic	63	9.5	520	78.1	83	12.5	666
Black non-Hispanic	6	6.5	77	82.8	10	10.8	93
Hispanic	12	10.2	96	81.4	10	8.5	118
Asian or Pacific Islander	2	13.3	10	66.7	3	20.0	15
American Indian or Native Alaskan	1	16.7	4	66.7	1	16.7	6
<b>Total</b>	<b>84</b>	<b>9.4</b>	<b>707</b>	<b>78.7</b>	<b>107</b>	<b>11.9</b>	<b>898</b>

$$\chi^2(8, N=898) = 4.631, p = .796$$

An analysis of graduation and persistence rates across the three SCCC campuses shows no significant differences in campus graduation or persistence rates among students in the cohort. See Table 11.

Table 11. Graduation & Persistence by Campus, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005.

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Ammerman	47	10.7	333	75.7	60	13.6	440
Eastern	9	6.7	115	85.8	10	7.5	134
Grant	28	8.6	259	79.9	37	11.4	324
Total	84	9.4	707	78.7	107	11.9	898

$$\chi^2(4, N = 898) = 6.827, p = .145$$

Investigation of the effect of age on graduation and persistence rates revealed no significant differences in graduation or persistence rates of students in the cohort according to age. See Table 12.

Table 12. Graduation & Persistence by Age, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
19 & Below	37	9.9	291	78.0	45	12.1	373
20 – 22 yrs	15	7.6	165	83.8	17	8.6	197
23 – 30 yrs	14	7.8	145	81.0	20	11.2	179
31 & Above	18	12.1	106	71.1	25	16.8	149
Total	84	9.4	707	78.7	107	11.9	898

$$\chi^2(6, N = 898) = 9.095, p = .168$$



An examination of graduation rates of students in the cohort according to developmental placement revealed that a significantly higher proportion of non-developmental students than developmental students graduated (14.1% of non-developmental vs. 7.7% of developmental). Further, a lower proportion of non-developmental students than developmental students were no longer attending (75.5% non-developmental vs. 84.9% developmental). There was no significant difference in the proportion of non-developmental students and developmental students who remained enrolled. See Table 13.

Table 13. Graduation & Persistence by Developmental Placement, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005.

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Developmental	23	7.4	264	84.9	24	7.7	311
Non-Developmental	61	10.4	443	75.5	83	14.1	587
Total	84	9.4	707	78.7	107	11.9	898

Note: Students classified developmental require remedial coursework in two or more basic skill areas.  
 $X^2(2, N = 898) = 11.280, p = .004$

The number of developmental courses required of students in the cohort was found to have a significant effect on graduation and persistence rates in the overall analysis. Not surprisingly, part-time matriculated students who required no developmental courses graduated in the highest proportion (18%). A nearly significant linear trend (Mantel-Haenszel  $\chi^2(1, N = 898) = 3.061, p = .08$ ) can be seen in the graduation rates of the part-time matriculated cohort with graduation rates decreasing as the number of developmental courses required increases.<sup>1</sup> See Table 14 and Figure 2.

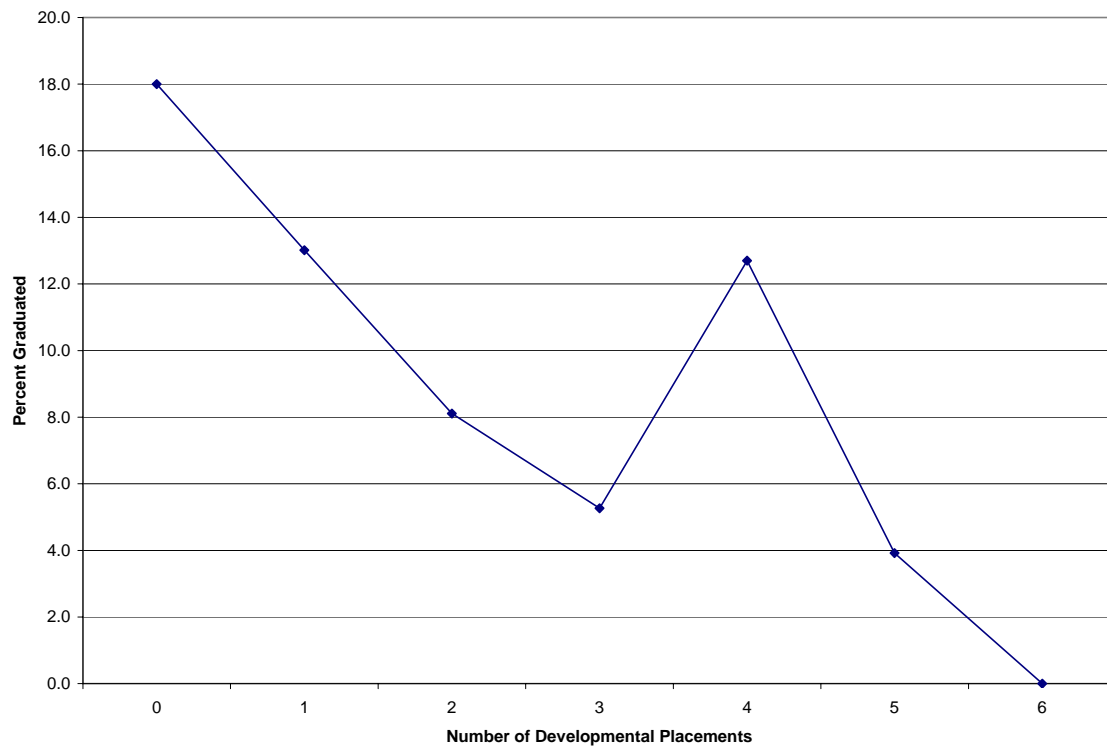
Table 14. Graduation & Persistence by Number of Developmental Courses Required, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005.

Number of Developmental Courses Required	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
0	30	10.0	216	72.0	54	18.0	300
1	16	9.5	131	77.5	22	13.0	169
2	22	11.9	148	80.0	15	8.1	185
3	13	11.4	95	83.3	6	5.3	114
4	1	1.6	54	85.7	8	12.7	63
5	2	3.9	47	92.2	2	3.9	51
6	0	-	16	100.0	0	-	16
Total	84	9.4	707	78.7	107	11.9	898

$\chi^2(12, N = 898) = 34.322, p = .001$

<sup>1</sup> An inverse linear trend (i.e., as the number of developmental courses increased, the rate of graduation decreased) with one exception. First-time part-time students requiring four developmental placements (N=63), had a rate of graduation that exceeded those members of the part-time cohort that required two or three developmental placements. Further, the proportion of graduating students requiring four developmental placements was on par with the rate of graduation for students who required only one developmental placement.

Figure 2. Graduation by Number of Developmental Courses Required, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005.



An analysis of the graduation and persistence rates for Career and Transfer program students revealed no significant differences in the rates for the two programs. There were too few students enrolled in Certificate (or other) programs to be included in the analysis for continued enrollment.

Table 15. Graduation & Persistence by Career and Transfer Program, Fall 2000 First-Time Part-Time Matriculated Students, Status as of Fall 2005.

	Attending		Not Attending		Graduate		Total
	Count	Row %	Count	Row %	Count	Row %	Count
Transfer Program	60	8.8	541	79.4	80	11.7	681
Career Program	23	11.5	152	76.0	25	12.5	200
Certificate/Other	1	5.9	14	82.4	2	11.8	17
<b>Total</b>	<b>84</b>	<b>9.4</b>	<b>707</b>	<b>78.7</b>	<b>107</b>	<b>11.9</b>	<b>898</b>

$$\chi^2(4, N = 898) = 1.754, p = .781$$

Table 16 provides the SCCC Outcome for all students who were first-time part-time matriculated Fall 2000 cohort by student's original curriculum code.

Table 16. Graduation and Persistence by Original Curriculum Fall 2002 First-Time Part-Time Matriculated Students.

Curriculum Code	SCCC Outcome							
	Attending		Not Attending		Program Graduate		Other Graduate	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
100	1	14.3	5	71.4	1	14.3	0	-
101	2	9.5	15	71.4	2	9.5	2	9.5
102	0	-	1	100.0	0	-	0	-
103	55	9.3	467	78.9	37	6.3	33	5.6
109	0	-	1	100.0	0	-	0	-
110	0	-	1	100.0	0	-	0	-
200	0	-	8	100.0	0	-	0	-
203	0	-	4	100.0	0	-	0	-
204	0	-	1	100.0	0	-	0	-
205	0	-	2	100.0	0	-	0	-
206	1	50.0	1	50.0	0	-	0	-
207	0	-	12	80.0	1	6.7	2	13.3
208	0	-	6	85.7	1	14.3	0	-
210	0	-	1	100.0	0	-	0	-
211	1	5.6	16	88.9	0	-	1	5.6
301	1	100.0	0	-	0	-	0	-
302	0	-	2	66.7	1	33.3	0	-
306	0	-	2	100.0	0	-	0	-
307	0	-	1	100.0	0	-	0	-
308	0	-	1	100.0	0	-	0	-
309	0	-	1	33.3	1	33.3	1	33.3
312	1	16.7	5	83.3	0	-	0	-

continued

Table 16. Graduation and Persistence by Original Curriculum Fall 2002 First-Time Part-Time Matriculated Students.

Curriculum Code	SCCC Outcome							
	Attending		Not Attending		Program Graduate		Other Graduate	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
314	1	11.1	8	88.9	0	-	0	-
315	7	12.3	43	75.4	5	8.8	2	3.5
318	1	33.3	2	66.7	0	-	0	-
319	2	40.0	3	60.0	0	-	0	-
320	0	-	1	50.0	1	50.0	0	-
325	0	-	1	100.0	0	-	0	-
329	1	16.7	4	66.7	1	16.7	0	-
330	2	9.5	18	85.7	0	-	1	4.8
333	1	16.7	5	83.3	0	-	0	-
334	0	-	4	100.0	0	-	0	-
335	2	18.2	8	72.7	0	-	1	9.1
342	2	15.4	9	69.2	2	15.4	0	-
343	1	16.7	4	66.7	1	16.7	0	-
346	0	-	5	100.0	0	-	0	-
348	0	-	0	-	1	100.0	0	-
364	0	-	3	100.0	0	-	0	-
365	0	-	5	100.0	0	-	0	-
366	0	-	4	100.0	0	-	0	-
367	0	-	1	100.0	0	-	0	-
370	0	-	1	100.0	0	-	0	-
371	0	-	1	16.7	5	83.3	0	-
372	0	-	4	80.0	1	20.0	0	-

continued

Table 16. Graduation and Persistence by Original Curriculum Fall 2002 First-Time Part-Time Matriculated Students.

Curriculum Code	SCCC Outcome							
	Attending		Not Attending		Program Graduate		Other Graduate	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
388	0	-	3	100.0	0	-	0	-
389	0	-	2	100.0	0	-	0	-
390	1	33.3	1	33.3	1	33.3	0	-
401	0	-	1	100.0	0	-	0	-
402	0	-	1	100.0	0	-	0	-
406	0	-	1	100.0	0	-	0	-
407	0	-	2	100.0	0	-	0	-
410	0	-	3	100.0	0	-	0	-
413	0	-	2	100.0	0	-	0	-
421	0	-	2	100.0	0	-	0	-
433	0	-	1	50.0	1	50.0	0	-
500	1	33.3	1	33.3	0	-	1	33.3



### **Part 3 – Number of Years to Graduate, through Fall 2005, for Students Who Were First-Time in Fall 1995**

This section reports how many years it took students who were matriculated first-time students in Fall 1995 to graduate. Full-time and part-time matriculated students within the Fall 1995 first-time cohort were examined separately and together in the analysis, which tracked students through Fall 2005. The analysis is shown in Table 17 below.

#### **Results**

##### **Years to Graduate 1995 – 2005 -- Fall 1995 First-Time Full-Time and Part-Time Matriculated Students.**

Of the students in the Fall 1995 first-time cohort, 1292 had graduated as of Fall 2005 (1014 full-time, 278 part-time matriculated). Of the students who graduated in those 10 years, 466 (51.7%) graduated within three years. The cumulative proportion of graduates increased steadily from the fourth through the tenth years (71.6% graduated within four years, 80.6% within five years, and 87.3% within six years).

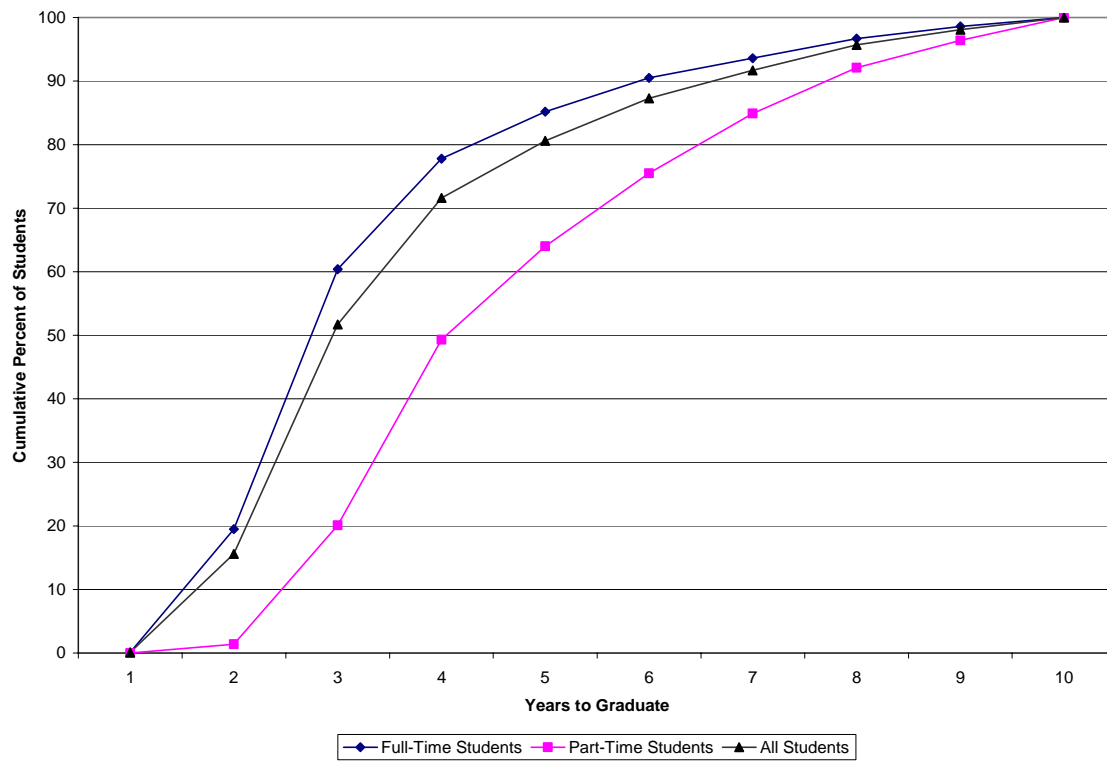
Full-time students represent 78.5% (1014 of the 1292) of the students in this cohort who graduated within ten years. Full-time students ideally graduate in two years, and 197 (19.5%) of the full-time students in this cohort who graduated, did so within this period. At the end of three years a majority of the of the full-time students (60.4%) had graduated, by the end of four years 77.8% had graduated, and after six years 90.5% had graduated.

Part-time matriculated students represent the additional 21.5% (278 of the 1292) of graduated students in this Fall 95 cohort. Part-time matriculated students would be expected to, and did, show a similar but delayed pattern of results. Nearly a majority of the part-time matriculated students graduated within four years (49.3%). At the end of five years 64.0% had graduated, and after six years 75.5% had graduated. The proportion of graduated part-time matriculated students from this cohort increased a little more dramatically than that of the full-time students over years seven, eight, and nine (84.9% in seven years, 92.1% in eight years, 96.4% in nine years, and the final 3.6% of part-time matriculated students in this cohort graduated in the tenth year).

Table 17. Years to Graduate, Fall 1995 Entering First-Time Full-Time and Part-Time Matriculated (Graduated) Students, Status as of Fall 2005.

YEARS TO GRADUATE	Full-Time			Part-Time			Total		
	N	Col %	Cum %	N	Col %	Cum %	N	Col %	Cum %
<b>1</b>	1	0.1	0.1	0	0.0	0.0	1	0.1	0.1
<b>2</b>	197	19.4	19.5	4	1.4	1.4	201	15.6	15.6
<b>3</b>	414	40.8	60.4	52	18.7	20.1	466	36.1	51.7
<b>4</b>	177	17.5	77.8	81	29.1	49.3	258	20.0	71.6
<b>5</b>	75	7.4	85.2	41	14.7	64.0	116	9.0	80.6
<b>6</b>	54	5.3	90.5	32	11.5	75.5	86	6.7	87.3
<b>7</b>	31	3.1	93.6	26	9.4	84.9	57	4.4	91.7
<b>8</b>	32	3.2	96.7	20	7.2	92.1	52	4.0	95.7
<b>9</b>	19	1.9	98.6	12	4.3	96.4	31	2.4	98.1
<b>10</b>	14	1.4	100.0	10	3.6	100.0	24	1.9	100.0
<b>Total</b>	1014	100.0	-	278	100.0	-	1292	100.0	-

Figure 3. Years to Graduate.



**Part 4 – Percentage of First-Time Students Graduating After a Specified Number of Years, for Students Entering Fall 1995 through Fall 2004**

This section reports the percentages of the first-time full-time Fall 1995 through Fall 2004 cohorts that had graduated after a specified number of years. The cohorts were tracked through Fall 2005. The analysis is shown in Table 18 and Figure 4 below.

Table 18. Percentage of Entering Students Graduating After Specified Number of Years, Fall 1995 – Fall 2004 Entering First-Time Full-Time Students.

	Years to Graduate								
	2	3	4	5	6	7	8	9	10+
1995	7.0	21.6	27.8	30.4	32.3	33.5	34.6	35.3	35.8
1996	7.2	23.1	29.2	32.6	34.4	35.6	36.4	37.0	
1997	6.3	20.5	27.8	30.7	32.8	33.9	34.8		
1998	6.0	22.6	29.1	31.7	33.0	34.0			
1999	6.8	23.2	29.9	32.3	34.3				
2000	6.4	22.6	29.9	32.7	34.5				
2001	8.2	23.8	29.6	32.4					
2002	6.2	20.5	26.7						
2003	5.9	19.1							
2004	5.2								
Average	6.5	21.9	28.8	31.8	33.6	34.3	35.27	36.2	35.8

An examination of the cumulative percent of students who graduated at various intervals over a ten year period was conducted for the first-time full-time students entering SCCC from Fall 1995 through Fall 2004. Across the ten years since 1995, on average 6.5% of students graduated in two years. After a third year, the cumulative average increased from 6.5% to 21.9%, after 4 years the average cumulative graduation rate increased to 28.8%, and to 35.8% at the end of ten years or more.

The students in the entering class of 2001 had the highest two-year graduation rate (8.2%). The entering class of 2004 had the lowest two-year graduation rate 5.2%. (See Table 18.) The highest three-year graduation rate (23.8%) belonged to the entering class of 2001; the lowest (19.1%) to the entering class of 2003. The entering class of 2000 shows the highest cumulative rate of graduation across the first six years.



**Part 5 – Persistence of First-Time Full-Time Students Entering Fall 1995 –Fall 2004**

This section provides persistence data by gender on first-time full-time Fall 1995 through Fall 2004 cohorts. Persistence data are reported on both a semester-to-semester (i.e., First Fall-to- Next Spring) level and year-to-year (i.e., First Fall-to-Next Fall) level.

**Results****Persistence by Gender - Fall 1995 to Spring 2004 - Entering First-Time Full-Time Students**

An analysis was conducted on first Fall to next Spring semester-to-semester persistence over 10 years. The average persistence rate from the Fall to the Spring semester was 81.3%. The group that persisted was on average 52.8% female and 47.2% male.

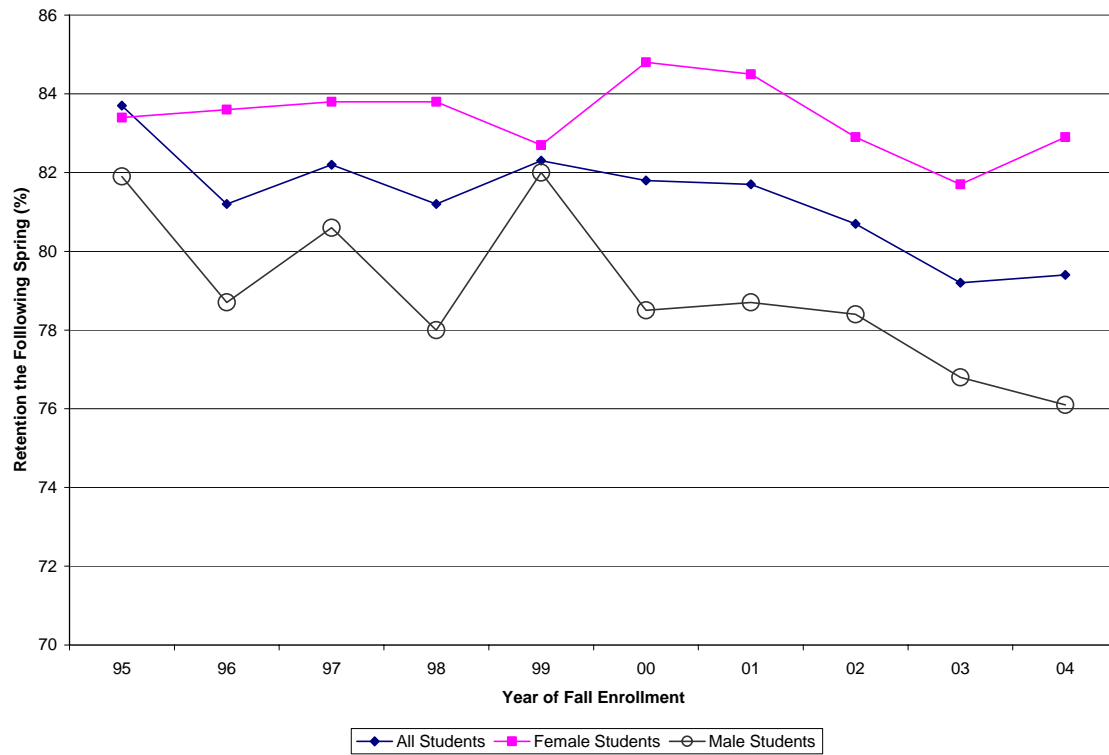
Persistence rates among females ranged from 81.7% to 84.8%, and averaged 83.4% (SD=.86). Male persistence rates ranged from 76.1% to 81.9%, and averaged 79.0% (SD=1.87). In general females showed greater persistence than males, with less variation over time than males. See Table 19 and Figure 5.

Table 19. First Fall to Next Spring Persistence by Gender, Fall 1995 to Fall 2005 First-Time Full-Time Students, Status as of Spring 1996 to Spring 2005.

Cohort	ENROLLED FIRST FALL			ATTENDING NEXT SPRING					
	TOTAL	FEMALE	MALE	TOTAL		FEMALE		MALE	
	COUNT	COUNT	COUNT	COUNT	%	COUNT	%	COUNT	%
FALL 1995	2835	1452	1383	2373	83.7	1240	83.4	1133	81.9
FALL 1996	2891	1477	1414	2348	81.2	1235	83.6	1113	78.7
FALL 1997	2940	1512	1428	2418	82.2	1267	83.8	1151	80.6
FALL 1998	3025	1628	1397	2455	81.2	1365	83.8	1090	78.0
FALL 1999	2923	1556	1367	2407	82.3	1287	82.7	1120	82.0
FALL 2000	2746	1453	1293	2247	81.8	1232	84.8	1015	78.5
FALL 2001	3016	1584	1432	2465	81.7	1338	84.5	1127	78.7
FALL 2002	3446	1751	1695	2780	80.7	1451	82.9	1329	78.4
FALL 2003	3740	1840	1900	2962	79.2	1503	81.7	1459	76.8
FALL 2004	3725	1803	1922	2957	79.4	1495	82.9	1462	76.1
				Avg.	81.3	Avg.	83.4	Avg.	79.0
				SD	1.29	SD	0.86	SD	1.87



Figure 5 Fall to Spring Persistence by Gender.



First Fall to Next Fall annual persistence was also examined over 10 years. The average persistence rate from year to year was 65 %. The group which persisted was on average 54% female and 46% male.

Table 20. First Fall to Next Fall Persistence by Gender, Fall 1995 to Fall 2004 Entering First-Time Full-Time Students, Status as of Fall 1996 to Fall 2005.

COHORT	ENROLLED FIRST FALL			ATTENDING NEXT FALL					
	TOTAL	FEMALE	MALE	TOTAL		FEMALE		MALE	
	COUNT	COUNT	COUNT	COUNT	%	COUNT	%	COUNT	%
FALL 1995 -	2835	1452	1383	1803	63.6	991	68.3	812	58.7
FALL 1996 -	2891	1478	1413	1885	65.2	1000	67.6	885	62.6
FALL 1997 -	2940	1512	1428	1917	65.2	1018	67.3	899	63
FALL 1998 -	3025	1628	1397	1953	64.6	1108	68	845	60.5
FALL 1999 -	2923	1556	1367	1881	64.4	1028	66.1	853	62.4
FALL 2000 -	2746	1453	1293	1820	66.3	1012	69.6	808	62.5
FALL 2001 -	3016	1584	1432	2047	67.9	1107	69.9	940	65.6
FALL 2002 -	3446	1751	1695	2210	64.1	1194	68.2	1016	59.9
FALL 2003 -	3740	1840	1900	2386	63.8	1230	66.8	1156	60.8
FALL 2004 -	3725	1803	1922	2407	64.6	1189	65.9	1218	63.4
				Avg	65.0	Avg	67.8	Avg	61.9
				SD	1.22	SD	1.26	SD	1.89

Persistence rates among females ranged from 65.7% to 69.9%, and averaged 67.8% (SD=1.26). Male persistence rates ranged from 60.4% to 66.7%, and averaged 61.9% (SD=1.89). As was seen with semester to semester persistence, fall to fall persistence

among females was higher than among males, with less variation over time than males.

Variation in both male and female persistence was greater in year-to-year persistence

than in semester-to-semester persistence. See Table 20 and Figure 6.

Figure 6. Fall to Fall Persistence by Gender.

