

USCA Academic Tracking Report #2
Academic Success (Fall 2003) of Undergraduates
Transferring from Aiken Technical College (Revised)
Conducted in Spring 2004

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Executive Summary

This document represents a study of the academic performance following the Fall 2003 semester of 295 students who had transferred from Aiken Technical College (ATC) to the University of South Carolina Aiken (USCA). In the context of this study, the primary measure of academic success is students' cumulative University of South Carolina system (USC) grade point average (GPA). The complexities involved with isolating this population should prompt the findings of this study to be taken as suggestive rather than definitive.

- 1. The demographics of ATC transfer students roughly mirror the race and ethnicity of the overall USCA undergraduate population. ATC transfer students are older (55.9% are over 25 years old) and more frequently enrolled part-time (39.0%) than other USCA undergrads.
- 2. As a group, ATC transfer students have a high C+ GPA (2.72), which is comparable to that of all USCA undergraduates (2.75), although ATC transfer students performed at slightly lower levels than USCA undergrads when controlling for age differences. This level of performance among ATC transfer students is lower than their earlier level of academic achievement at ATC, where their average cumulative GPA was about a "B" (2.95).
- 3. ATC transfer students in this study attempted an average of 55 credit hours and were not able to transfer 19 of these credits to USCA because they were earned with less than a "C" or were remedial or vocational in nature. African American students and older students had more non-transferable credits than did white and younger students.
- 4. Three major factors were found to relate to overall academic performance of ATC students who have transferred to USCA:
 - Lower first semester grades. In their first semester, ATC transfer students earned an average USC cumulative GPA of 2.38. This level of performance is (a) lower than USCA students with a comparable credit count, who earned a USC cum GPA of 2.81; (b) lower than students in their first USCA semester transferring from institutions other than ATC, who earned a USC cum GPA of 2.69; and (c) about the same as entering full-time freshmen, who earned a USC cum GPA of 2.39.
 - Credits attempted at ATC. ATC transfer students attempting between 10 and 75 hours performed academically at about the same level as the general USCA undergraduate population. When attempting fewer than 10 credits at ATC, students' academic performance at USCA was above average, and when attempting more than 75 credits at ATC, their USCA academic performance was below average.
 - Academic Performance at ATC. ATC GPA correlated moderately with USC GPA (ρ =0.396 overall, ρ =0.448 for first USCA semester). Large standard deviations reduce the predictive usefulness of this finding in making admissions decisions.
- 5. Distribution patterns of ATC transfer students among USCA majors indicate segmentation by academic performance. ATC students have higher USC GPAs in education (3.00), ADN nursing (2.98), and a handful of other disciplines; they are significantly lower in psychology (1.97), sociology (2.26) and BSN nursing (2.55).
- 6. Academic success for the ATC transfer student population in English, math, and other high enrollment courses was mixed. Average grades in composition courses (AEGL 101 and 102) mirrored those of the general USCA population, but grades in disciplinary based courses such as 200-level literature, AHST 101, and introductory mathematics (AMTH 108 and AMTH 170) were lower than USCA averages. Grades for ATC transfers were higher than the USCA averages in courses such as calculus (AMTH 141-2), required political science (APLS 201), and Spanish language courses (ASPA 101-2).

Methodology and Population for Analysis

An aggregate analysis of transfer students from a single institution, such as from ATC to USCA, can present a number of complexities that are difficult to overcome. Students who transfer credits from one institution of higher education to another have often attended multiple colleges and universities, sometime concurrently. Credits taken at one institution may transfer to one institution and not another, and the transcript evaluation process can often be slow even when articulation agreements are in place. Further, students may intentionally or unintentionally switch home institutions as they take classes at several institutions in close geographic proximity to one another. Thus, the complications of real-life student behavior coupled with the limitations of the USC data management system of flat files introduces an element of sample error into the current study that should prompt its findings to be taken as suggestive rather than definitive.

Student records were included in this study only if the last institution they attended was Aiken Technical College (ATC) and if they were registered for classes at USCA for the Fall 2003 semester. These records were gathered from a copy of the USC mainframe file E02AIKN (frozen on October 25, 2003 following the withdrawal deadline) and combined with course grade data from the USC mainframe Unofficial Totals file created in December 2003 following final grade reporting. In all, 295 records of students from ATC were selected for analysis.

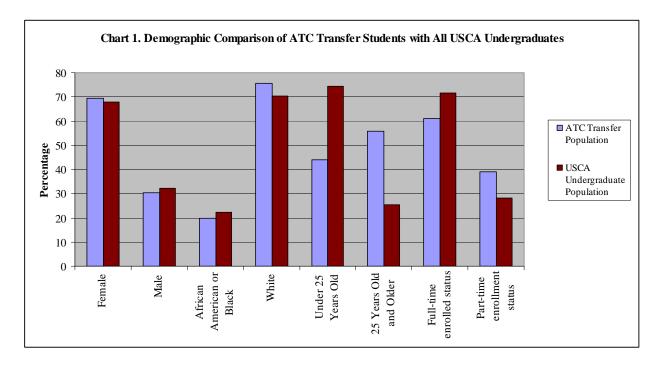
Because this methodology allows for the inclusion of students' academic records from institutions other than ATC, 20 records (6.7% of sample) were randomly selected for manual transcript analysis using the USC student Information Management System (IMS) to determine sample integrity. This sampling indicated that 93% of all non-USC credits were from ATC and that 18 out of 20 students (90%) had earned 98-100% of their non-USC credits from ATC. The remaining two students had earned 45% and 10% of their credits at ATC. These two individuals exhibited moderately stronger academic performance than did those who took coursework almost exclusively at ATC; further analysis would be required to reasonably re-weight the performance of the entire sample population. For instance, an investigation into matriculation date at USCA of ATC transfer students indicated only a 60% reliability that the term applied date for records stored in the database represents the first date of attendance at a USC institution (see Table 3, note 4).

For the purposes of this report all individuals in the sample are referred to as students from ATC, and their non-USC credits are considered to be credits earned at ATC.

Demographic Profile of Transfer Students from ATC

The demographic profile of students transferring to USCA from ATC roughly mirrors that of all students at USCA in terms of gender and ethnicity, although male and African American transfer students from ATC are slightly underrepresented when compared to the entire USCA undergraduate population. A more significant, although unsurprising, difference is observed in the age and enrollment status of students transferring from ATC. While in Fall 2003 74.5% of undergraduates at USCA (excluding Teacher Cadets, Special Students, and Transient Students) were under 25 years old, only 44.1% of transfer students from ATC fell into this age category. Additionally, while 71.7% of the USCA undergraduate population was enrolled at full-time status taking 12 credit hours or more, only 61.0% of ATC students were enrolled full-time.

Table 1. Demographic Comparison of ATC Transfer Population with all USCA Undergraduates										
Chuci gi audates	ATC Transfe	er Population	USCA Undergraduat Population Population							
	(N)	(%)	(N)	(%)						
Female	205	69.5	2,204	67.8						
Male	90	30.5	1,043	32.2						
African American or Black	58	19.7	720	22.2						
White	223	75.6	2,284	70.3						
Under 25 Years Old	130	44.1	$2,242^{1}$	74.5						
25 Years Old and Older	165	55.9	768 ¹	25.5						
Full-time enrollment status	180	61.0	2,329	71.7						
Part-time enrollment status	115	39.0	918	28.3						



¹ Excludes Teacher Cadets, Special Students, and Transient Students.

Demographic Factors and Academic Performance

The collective academic performance of students from ATC was lower at USCA than their previous level of academic success at ATC, but their average cumulative USC GPA is nevertheless similar to that of other USCA students. While students transferring from ATC earned about a flat "B" average (2.95 ATC cumulative GPA, S = 0.63) at ATC, their collective academic performance at USCA averaged about a high "C+" (2.72 USC cumulative GPA, S = 0.81) at the end of the Fall 2003 semester. This level of academic success, however, is comparable to the performance of all USCA undergraduates, for whom the mean cumulative USC GPA was 2.75, S = 0.80.

Table 2. Academic Performance of ATC Transfers by Demographic Characteristics										
		Avg.	Avg. ATC		Âvg. USC	Avg. USC				
		Transferable	Hours	Avg. ATC	Hours	Hours	Avg. USC			
	\mathbf{N}	ATC Hours	Attempted	cum GPA	Earned	Attempted	cum GPA			
Transfers from Aiken Tech	295	36	55	2.95	47	49	2.72			
All USCA Undergrads ²	3010	NA	NA	NA	58	NA	2.75			
Gender										
Female	205	35	54	2.96	47	50	2.74			
Male	90	38	57	2.92	45	47	2.69			
Race or Ethnicity										
African American or Black	58	41	70	2.70	44	47	2.33^{3}			
White	223	34	50	3.01	48	51	2.81			
Enrollment Status										
Full-time (F03) at USCA	180	36	52	2.93	50	52	2.72			
Part-time (F03) at USCA	115	36	59	2.98	42	45	2.73			
Age										
Under 25 Years Old	130	32	45	2.93	44	46	2.60			
25 Years Old and Older	165	38	62	2.97	49	52	2.82			

Avg. Transferable ATC Hours represents mean credit hours earned at Aiken Technical College that transfer to USCA to count toward degree; the undergraduate transfer policy appears in the 2003-2004 Undergraduate Bulletin (pp. 36-37). Specific academic programs employ supplementary policies regarding the transfer of credit.

Avg. ATC Hours Attempted indicates the mean number of credit hours attempted at Aiken Technical College. These hours will include courses that were not passed, were withdrawn from, or did not transfer to USCA.

Avg. ATC cum GPA is the mean cumulative grade point average of students for their period of enrollment at Aiken Technical College. It is calculated on the hours attempted at ATC and represents students' GPA at admission to USCA.

Avg. USC Hours Earned represents mean credit hours earned in the University of South Carolina system.

Avg. USC Hours Attempted represents mean credit hours attempted in the University of South Carolina system.

Avg. USC cum GPA is the mean cumulative grade point average for coursework completed in the USC system.

Demographic factors of age and race appear to correspond to students' level of academic performance, but similar trends in GPA are observed among these groups in the entire USCA undergraduate population (see Table 2). For instance, while African Americans transferring from ATC to USCA registered a cumulative USC GPA of 2.33 at the end of Fall 2003, the mean GPA of all USCA African American undergraduates was 2.32.

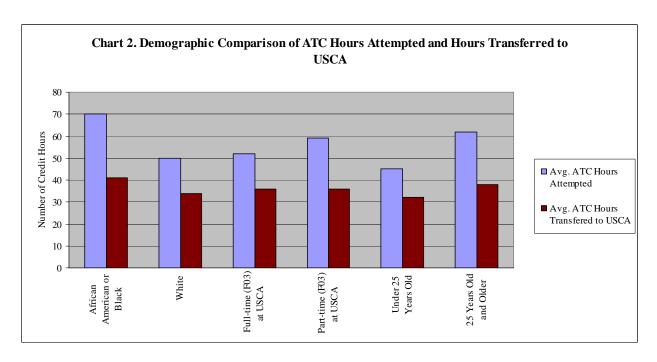
² Excludes Teacher Cadets, Special Students, and Transient Students.

³ Following the Fall 2003 term, the mean cumulative GPA for all black or African American undergraduates at USCA was 2.32 (mean USC hours earned = 57, mean collegiate hours earned = 76).

Slight differences between ATC transfers and the general undergraduate population were observed by age group, and when adjusting for age, ATC transfer students perform at levels lower than all USCA undergraduates. All USCA undergraduates under the age of 25 posted an average GPA of 2.69, and those over 25 had an average GPA of 2.95. Among transfers from ATC, for students under 25 years old the mean USC cumulative GPA was 2.60 and for students over 25 it was 2.83, indicating a slightly poorer performance for those students transferring from ATC. The differential between age groups in both populations is quite possibly a function of personal maturity and financial commitment to their own education.

Students transferring from ATC to USCA on average were not able to transfer 19 credit hours of work completed at ATC. These non-transferable credits included courses that students did not pass with a "C" or better, courses from which they withdrew, and courses that were vocational or remedial in nature and may not transfer to a USC bachelor's degree program. While white students averaged 16 non-transferable hours, Black or African American students had on average 29 hours that would not transfer to a bachelor's degree program, equating to just over 50% more non-transferable hours than white transfer students accumulated. In terms of degree completion, these numbers suggest that African American transfer students from ATC must spend one more semester at full-time status to obtain a bachelor's degree than do their white counterparts. All ATC transfer students must spend one more semester at full-time status (two semesters for African American students) to earn a bachelor's degree than do students who began at USCA. Students over 25 years old also registered a large number of non-transferable credit hours, with 24 hours that would not transfer. Only small differences in transferable hours were observed between students who registered as full-time or part-time students at USCA, and no differences were apparent between men and women.

The proportion of hours earned and hours attempted at USCA appears constant across all demographic groups. The two to three credit disparity between these figures suggests that most ATC transfer students have either withdrawn from or earned an "F" in one three credit course.



Factors Related to Overall Academic Performance

The First Semester at USCA

The most noticeable characteristic in the academic performance of ATC transfer students coming to USCA is a weak academic record for the first semester they spend at USCA. In Fall 2003 for ATC students attending USCA who had applied to USCA for that term, the average USC GPA was 2.38. When adjusting for sample error, this GPA appears even lower at 2.29 (see Table 3, note 4). For the 17 students who had also taken summer courses at USCA in Summer 2003, their Fall performance was not significantly better with an average USC GPA of 2.42. This level of academic performance is comparable to that of the incoming full-time freshmen, for whom the average GPA was 2.39 in Fall 2003; the vast majority of these students had no previous college experience or only a few college credits.

To provide some other appropriate comparison groups, USCA students who had earned between 15 and 45 hours (the mean number of earned hours for this group was 29) at USCA before the start of the Fall 2003 semester, posted an average cumulative GPA of 2.81 by the end of that term. In all likelihood, the change in environment from one institution to another accounts for some of the lower performance among ATC transfers in the first term at USCA. Yet transfer students from ATC exhibit weaker academic performance than students transferring from other institutions. For all students who transferred to USCA in the Fall of 2003 (n=317), the average USC GPA was 2.61, and 2.69 for students who transferred from an institution other than ATC (n=233).

Table 3. Fall 2003 Academic Performance of ATC Transfer Students by Term Applied to
USCA

Term Applied to USCA	N	Avg. Transferable ATC Hours	Avg. ATC Hours Attempted	Avg. ATC cum GPA	0	Avg. USC Hours Attempted	Avg. USC cum GPA
Fall 2003	84	36	53	2.98	16	18^{4}	2.38
Summer 2003	17	45	67	2.72	39	42	2.42
Spring 2003	21	40	70	3.04	36	39	3.02
Fall 2002	57	37	57	2.95	40	42	2.96
Summer 2002	7	36	58	3.00	56	58	3.16
Spring 2002	23	33	49	2.98	72	77	2.83
Fall 2001	37	30	45	3.10	67	70	2.82

Avg. Transferable ATC Hours represents mean credit hours earned at Aiken Technical College that transfer to USCA to count toward degree; the undergraduate transfer policy appears in the 2003-2004 Undergraduate Bulletin (pp. 36-37). Specific academic programs employ supplementary policies regarding the transfer of credit.

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Avg. USC Hours Earned represents mean credit hours earned in the University of South Carolina system.

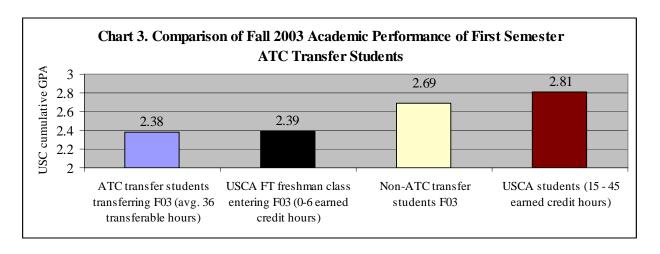
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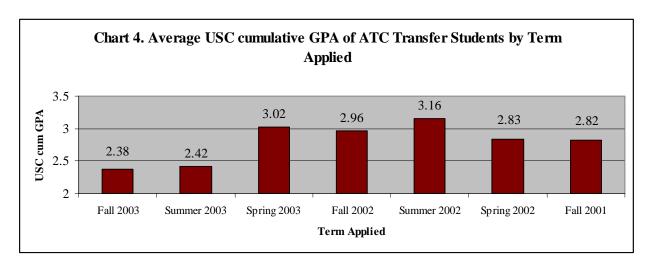
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⁴ Twelve of these students had earned 10 USC hours or more prior to Fall 2003, indicating the completion of previous USC coursework either at USCA or another USC institution. When these individuals are removed, the average USC hours attempted falls to 12, average USC hours completed falls to 10, and average USCA cum GPA falls to 2.29.



The markedly higher USCA GPAs of ATC transfer students who had been admitted to USCA prior to Summer 2002 may not be simply indicative of an acclimation process. Indeed, the improved academic performance corresponds to a drop in the number of transfer students, which would suggest strongly that the students earning low grades dropped out of USCA, whether forced to do so by the policies for academic probation and suspension or because they deemed their low level of academic performance not to be worth the investment.

Further evidence that suggests acclimation is not the only factor at work lies in the slight but noticeable decline in cumulative USC GPA for students who applied to USCA following Summer 2002. Since the average GPA of sophomores is typically higher than for freshmen, juniors' higher than sophomores', and seniors' higher than juniors', the academic performance of ATC transfer students who have attended USCA for five semesters is lower than it perhaps might be expected to be. One explanation for this observation may lie in students' sense of self-direction in academic matters or motivation to complete their degrees. While it is of course possible that these variations simply illustrate the limits of normal fluctuation, it is also possible that students who take longer to complete their work may posses less focus on degree objectives, and this diffusion of attention, which may manifest itself in changes of major or multiple course withdrawals may also coincide with lower levels of academic achievement.



Credit Hours Attempted at ATC

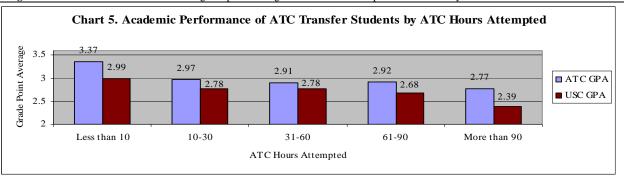
The number of hours attempted at ATC was an indicator of academic success at USCA only when students had completed fewer than ten hours or more than 90 hours at ATC. For typical ATC students who complete between 20 and 75 credit hours at ATC, little variation is noticed in their academic performance at USCA. However, students completing fewer than 10 hours at ATC exhibited stronger academic records at both institutions (3.37 ATC GPA, 2.99 USC GPA). It is likely that these students strategically took a few specific courses at ATC at a lower per credit cost and transferred them back to USCA (on average all of these credits transferred). This level of awareness about selectively using higher education to meet selected needs may be related to their classroom success.

By contrast, students who attempted more than 90 hours at ATC earned a GPA below average at both institutions (2.77 ATC GPA, 2.39 USC GPA). Students in this group may have taken a large number of remedial or vocational classes or earned poor grades in otherwise transferable classes. Students who have attempted this large number of credits may lack academic direction as well as the dispositions needed to enter into a course of study and complete its requirements. Further evidence that some amount of academic planning and initial curricular direction translate into academic success at USCA may be observed in an analysis of the *disparity* between hours attempted and transferable hours. The 119 ATC transfer students (40%) who had six or fewer nontransferable hours, also had average USC GPAs of 3.0. By contrast, the remaining 60% who had more than six nontransferable hours (avg. = 32) earned an average cumulative USC GPA of 2.53.

Table 4. Fall 2003 Academic Performance of ATC Transfer Students by ATC Hours Attempted										
_	N	Avg. Transferable ATC Hours	Avg. ATC Hours Attempted	Avg. ATC cum GPA		Avg. USC Hours Attempted	Avg. USC cum GPA			
Aiken Tech Hours Attempte	ed									
< 10 AT Hours Attempted	28	5	5	3.37	65	66	2.99			
10-30 AT Hours Attempted	42	16	21	2.97	63	66	2.78			
31-60 AT Hours Attempted	105	34	45	2.91	44	47	2.78			
61-90 AT Hours Attempted	85	49	75	2.92	39	41	2.68			
> 90 AT Hours Attempted	36	57	112	2.77	39	43	2.39			

Avg. Transferable ATC Hours represents mean credit hours earned at Aiken Technical College that transfer to USCA to count toward degree; the undergraduate transfer policy appears in the 2003-2004 Undergraduate Bulletin (pp. 36-37). Specific academic programs employ supplementary policies regarding the transfer of credit.

Avg. USC cum GPA is the mean cumulative grade point average for coursework completed in the USC system.



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Avg. ATC cum GPA is the mean cumulative grade point average of students for their period of enrollment at Aiken Technical College. It is calculated on the hours attempted at ATC and represents students' GPA at admission to USCA.

Avg. USC Hours Earned represents mean credit hours earned in the University of South Carolina system.

Avg. USC Hours Attempted represents mean credit hours attempted in the University of South Carolina system.

Academic Performance at ATC

Unsurprisingly, previous academic performance at ATC provides some indication of academic performance at USCA. Among the entire population of ATC transfer students, ATC GPA correlated with USC GPA, $\rho = 0.396$); this correlation was slightly stronger among ATC transfer students in their first semester at USCA, $\rho = 0.448$. This correlation, however, does not by itself provide a useful predictive formula for academic success at USCA because of the large standard deviation in ATC GPA and the weak to moderate relationship between ATC GPA and USC GPA (See Chart 5). Indeed, of the 40 ATC transfer students who earned below a USC GPA of 2.0, the average ATC GPA was over 2.60, ranging from 1.74 to 4.00.

Table 5. ATC transfer students by Fall 2003 cumulative GPA												
	N	Avg. Transferable ATC Hours	Avg. ATC Hours Attempted	Avg. ATC cum GPA	Hours	Avg. USC Hours Attempted	Avg. USC cum GPA					
USC cum GPA			•			•						
Less than 1.50	22	42	68	2.59	10	17	0.69					
1.50 to 1.99	18	31	53	2.66	48	59	1.78					
2.00 to 2.49	57	35	58	2.73	47	52	2.22					
2.50 to 2.99	74	35	54	2.87	54	56	2.73					
3.00 to 3.49	72	35	54	3.11	55	56	3.21					
3.50 to 4.00	51	38	49	3.37	40	40	3.79					

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Majors of ATC Transfer Students and Academic Performance

Distribution patterns of ATC transfer students among USC majors indicate segmentation by academic performance at both institutions; some of this distribution is attributable to the moderate correlation observed between academic performance at ATC and USCA. Of the majors with ten or more ATC transfer students, the highest levels of academic success at USCA were observed among education majors (3.00 for all specializations) and nursing students pursuing the ADN degree (2.98). In part, these majors are self selecting of a higher level of academic performance, however, since both programs place a 2.75 GPA minimum for admission into the school or into key courses. The strong performance of students majoring in English, exercise and sports science, fine arts, history, interdisciplinary studies, and political science appears roughly to correlate with their above average ATC GPAs.

Table 6. Majors of ATC Tra USCA GPA and ATC GPA	nsfer St	tudents	and.	Academ	ic Perfoi	mance by	Differe	ntial in
	Ava	Ava	ATC	Avg.	Avg.	Ava USC	Avg.	Avg. ATC

		Avg. transferable	Avg. ATC Hours	Avg. ATC cum	Avg. USC Hours	Avg. USC Hours	USC cum	and USC cum GPA
Major	N	ATC hours		GPA	Earned	Attempted	GPA	differential
Pre-Pharm/Allied Health	4	36	75	2.94	15	16	1.97	-0.97
Psychology	22	43	66	2.83	37	44	1.97	-0.86
Nursing (BSN)	21	22	42	3.07	41	43	2.55	-0.52
Sociology	20	45	63	2.67	50	55	2.26	-0.41
Undecided	10	27	34	3.08	18	21	2.67	-0.41
Chemistry	9	32	38	3.12	63	66	2.76	-0.36
Engineering	9	36	76	3.02	30	33	2.72	-0.30
Biology	14	29	36	2.93	59	60	2.64	-0.29
Industrial Mathematics	2	57	77	3.39	22	22	3.11	-0.28
Business	58	36	54	3.05	43	45	2.78	-0.27
English	7	40	56	3.20	57	64	2.94	-0.26
Political Science	3	37	69	3.29	24	26	3.03	-0.26
All Majors	295	36	55	2.95	47	49	2.72	-0.23
Communications	7	31	48	2.72	73	78	2.55	-0.17
Exercise & Sports Science	5	37	42	3.31	51	54	3.14	-0.17
Math & Computer Science	17	49	86	2.98	61	65	2.87	-0.11
Fine Arts	4	14	17	3.28	49	51	3.18	-0.10
Interdisciplinary Studies	2	64	81	3.50	71	74	3.48	-0.02
Education (Secondary)	8	41	65	2.80	58	61	2.87	0.07
History	5	41	48	2.74	57	62	2.87	0.13
Education (Early Child)	23	37	49	2.84	53	53	2.98	0.14
Nursing (ADN)	24	28	52	2.84	52	54	2.98	0.14
Education (Elementary)	16	39	51	2.87	40	42	3.09	0.22
Education (Special)	4	26	61	2.65	25	28	2.98	0.33

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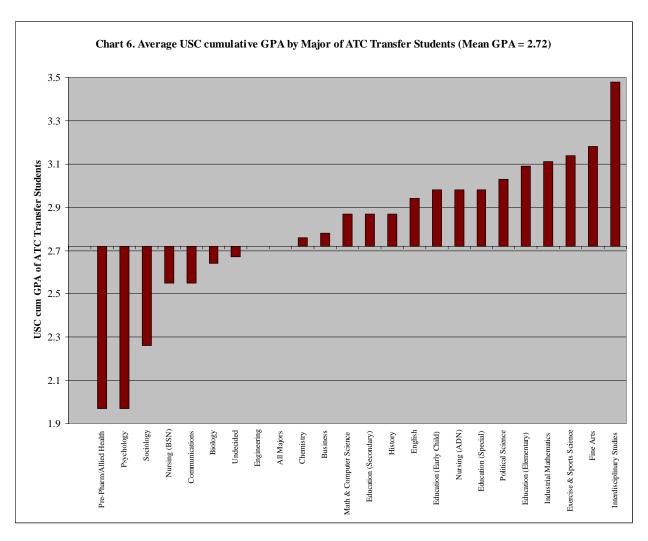
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Avg. USC cum GPA is the mean cumulative grade point average for coursework completed in the USC system.

Avg. ATC and USC cum GPA differential indicates the difference between ATC transfer students' ATC GPA and USC GPA. Negative numbers indicate a lower cumulative GPA at USCA than at ATC.

Among the major programs where ATC transfer students have the lowest cumulative USC GPAs are psychology (1.97), sociology (2.26), and the BSN nursing program (2.55). The low GPA of the ATC transfers who want to pursue the BSN program is particularly puzzling given the relatively high ATC GPA of that group and the minimum cutoffs for registration for clinical nursing courses. It is likely that students in this group have not yet reached the point in their academic careers where they can begin to take clinical nursing classes, and they will choose other majors in subsequent semesters.

The very low average GPAs of transfer students in sociology and psychology are in part related to weaker academic records at ATC. It may be that these major fields represent second choice areas of study for students who do not have sufficiently high GPAs to gain entry into the professional schools. Nevertheless, the substantial number of students who have declared these majors in conjunction with the very low average USC GPAs of these students warrants further attention and study.



Performance in English, Math and Other Courses

Overall registration patterns of ATC transfer students did not reveal many commonalities among courses in which this population of students enrolled. Further, while some significant differences in academic performance were observed between ATC transfer students and the general USCA undergraduate population, these differences were not uniformly higher or lower even within fields of study. When compared to the entire USCA undergraduate population, ATC transfer students perform about the same in composition courses, worse in introductory literature, history, and mathematics, and better in Spanish, political science, and calculus.

In English Composition courses at USCA (AEGL 101 and AEGL 102), ATC transfer students performed at almost exactly the same levels as other USCA students, even though the USC cum GPAs for these students was markedly lower than their native USCA counterparts. Perhaps most significantly, because ATC students earned grades in AEGL 102 (average course grade = 2.24) comparable to all USCA undergraduates (average course grade = 2.22), it may be inferred that their earlier preparation in college-level composition at ATC was as effective as AEGL 101. It is possible, of course, that most ATC students took all six required hours of composition at ATC, which could explain their lower performance in 200-level literature courses and introductory history, all of which require substantial writing in humanities disciplines, but an actual transcript check would be necessary to confirm this hypothesis. It is also important to observe that students taking these courses, presumably to meet general education requirements, have ATC GPAs well below the average of 2.95.

Table 7. Fa	Table 7. Fall 2003 Grades in Key Courses for ATC Transfer Students													
		ATC	ATC	-	All	All	Avg.	Avg.			Avg.			
	ATC	Transf.	Transf		USCA	USCA	transfer	ATC	Avg.	Avg.	USC	Avg.		
	Transf	Avg.	$\mathbf{W}\mathbf{D}$	All	Avg.	WD	able	Hours	ATC	USC	Hours	USC		
USCA	Enroll	Course	Rate	USCA	Course	Rate	ATC	Attempt	cum	Hours	Attempt	cum		
Course	(N)	Grade	(%)	(N)	Grade	(%)	hours	ed	GPA	Earned	ed	GPA		
AEGL 101	15	2.42	13.3	522	2.39	4.1	11	26	2.27	16	24	2.29		
AEGL 102	24	2.24	4.2	147	2.22	6.1	29	51	2.94	22	49	2.19		
AEGL 280-99	28	2.52	0.0	223	2.70	2.2	39	61	2.79	39	76	2.75		
AHST 101	24	2.24	12.5	319	2.46	6.7	32	52	2.58	39	68	2.42		
AMTH 108	14	2.29	14.3	351	2.42	5.4	22	41	2.21	23	44	2.03		
AMTH 111-2	10	1.50	0.0	116	1.69	14.7	32	50	3.02	26	55	2.57		
AMTH 141-2	8	3.50	0.0	84	2.73	11.9	29	56	3.24	36	61	3.00		
AMTH 170	16	2.57	6.3	96	2.94	7.9	41	61	3.09	27	66	2.81		
APLS 201	28	2.83	7.1	219	2.50	9.1	31	47	3.06	30	58	2.87		
ASPA 101	16	3.46	18.8	73	3.03	8.2	22	40	2.57	46	65	2.55		
ASPA 102	11	2.48	27.3	74	2.35	13.5	30	47	2.63	50	76	2.49		
ASTA 201	14	1.85	7.1	112	2.15	7.1	35	49	2.73	47	80	2.74		

Performance among ATC transfer students was stronger in calculus and weaker in introductory mathematics and statistics courses. In introductory mathematics, statistics, and pre-calculus, ATC transfer students earned noticeably lower grades than did other USCA students, yet those who took calculus (about 10% of all calculus I and II enrollments were ATC transfers), averaged a flat "B+" (3.50) in the course, significantly higher than the course average of a high "C+" (2.72).

ATC transfer students also earned noticeably higher grades in APLS 201 American National Government and in introductory Spanish courses. More in-depth research is probably necessary to confirm that these variations represent a real difference in ability because of preparation at ATC rather than a regular fluctuation in students' abilities.

Conclusions

While the nature of this report should prompt some possible avenues for additional investigation rather than definitive pronouncements about the success of students transferring to USCA from ATC, the findings of this study would suggest a few tentative conclusions:

- 1. The first semester at USCA for ATC transfer students appears to be a watershed. As a group, ATC transfer students perform worse academically in their first semester than do other transfer students and native USCA students. Additional first semester support, a bridge program, enhanced transfer orientation, or a special section of an ASUP course for incoming ATC transfers (or even all transfer students) could conceivably address some of the transitional issues.
- 2. ATC transfer students once they have successfully completed one or two semesters at USCA perform academically at levels virtually indistinguishable from other USCA undergraduates. This improvement in performance is likely due both to attrition of low performers as well as acclimation to the USCA environment.
- 3. ATC transfer students with a lower number of non-transferable credits performed better at USCA than those with a large amount of non-transferable course work. This finding in part reflects that students who take less remedial work perform better academically, but it may also indicate that non-directed students who take a wide array of non-transferable credits as they search for an educational path are less likely to do well at USCA. Some attention to advising at ATC and USCA could possibly improve these students' academic performance.
- 4. ATC transfer students exhibit lower levels of overall academic success in majors of psychology, sociology, and BSN nursing, and weak academic performance at ATC does not appear to account for much of this finding. While more study is required in this area, one possibility is that psychology and sociology are majors of second choice for students without the minimum GPAs for professional schools. Transfer students in the relatively new BSN program may not have reached the point where their grades prohibit them from continuing in that course of study.
- 5. Academic performance in specific courses is mixed. While ATC transfer students exhibit some weakness in lower level mathematics courses, their performance in calculus is above the USCA average. ATC transfers earn grades in composition courses comparable to the entire USCA population but fare worse in writing intensive general education courses, such as AHST 101 and 200-level literature courses. A substantive transcript review of all ATC coursework and transcripts from any other institutions in addition to USC transcripts would likely be required in order to identify more prominent patterns in areas of interest.