

**Academic Strategies Intervention
Year Three Analysis**

**November 11, 2011
Office of Planning and Institutional Research**



Executive Summary

A formative and summative analysis of the Academic Strategies course intervention has been conducted for Year 3 of the Achieving the Dream *Persistence* intervention. Measures of success were identified and evaluated for first-time freshmen who enrolled in Academic Strategies (ENGL 1003) and those who did not enroll in the course. In addition, the differences between students who took Academic Strategies and those who did not were examined among students in the Tulsa Achieves (TA) program as well as students who are not in the TA program.

Sample

A total of 8,192 students were included in this study, with 4,001 first-time freshmen from the 2009-2010 academic year and 4,191 first-time freshmen from the 2010-2011 academic year. Of these, 2,557 students enrolled in Academic Strategies (2,165, or 85%, of whom were TA students) and 5,635 of the students did not enroll in the course.

LASSI

A formative assessment of the Academic Strategies course was conducted using the Learning and Study Strategies Inventory (LASSI). This is a 10-scale, 80-item measure designed to assess students' awareness about and use of learning and study strategies related to skill, will and self-regulation components of strategic learning. Students completed the LASSI as a pretest at the beginning of the course and as a posttest at the end of the course, and results of the most recent academic year, 2010-2011, are reported here. First and second year results were similar and are reported in the 2008-2009 and 2009-2010 reports, respectively.

Dependent samples *t*-tests revealed statistically significant increases in mean pretest to posttest scores for all ten scales (99% confidence level). The greatest gains were for Selecting Main Ideas, Self-Testing, Information Processing, Study Aids, and Concentration. In particular, the largest increase from pretest to posttest and the second highest mean posttest score was for the Selecting Main Ideas scale (Information Processing was the only higher mean posttest score). Although statistically significant in the positive direction, the Attitude scale evidenced the smallest gain as well as the lowest mean posttest score. Altogether, the LASSI results parallel those from previous years and suggest that study strategies are being effectively taught in Academic Strategies.

Persistence

A summative assessment was conducted for this intervention with the following results related to student persistence. For both cohorts of first-time freshmen, students who enrolled in Academic Strategies persisted from Fall to Spring at a higher rate than did students who did not enroll in this course (99% confidence level). Moreover, for the 2009 cohort but not the 2010 cohort, the difference in persistence between Strategies students and non-Strategies students was significant for both TA students and non-TA students. Yet, for the 2010 cohort, the difference in Fall-to-Spring persistence between Strategies and non-Strategies students was significant only for TA students.

Students taking Academic Strategies were also significantly more likely to persist from Fall-to-Second Fall than students who did not take the course, for both cohorts (99% confidence level). When examining the Fall-to-Second Fall persistence within the TA and non-TA groups, the difference between Strategies students and non-Strategies students was only significant for TA students. Lastly, students in the Fall 2009 cohort who took Academic Strategies had a significantly higher rate of Fall-to-Third Fall persistence than those who did not take the course (99% confidence level). As with Fall-to-Second Fall persistence, when examining this effect within TA and non-TA groups, the difference between Strategies students and non-Strategies students was only significant for TA students.

It is important to note that the sample size for non-TA students taking Academic Strategies was fairly small (N = 199 and N = 193 for 2009 and 2010 cohorts, respectively) relative to the numbers of TA students taking Strategies (N = 1086 and N = 1079 for 2009 and 2010 cohorts, respectively). A more robust analysis of the benefits of Academic Strategies for the persistence of students who are not in the TA program would require a larger sample size.

Course Grades

Course grades for seven developmental and eight gateway courses with highest enrollment were evaluated as a function of enrollment in Academic Strategies. Moreover, differences were examined within TA and non-TA student groups to examine the extent to which the effects of enrolling in Academic Strategies are related to being in the TA program. For the grade analyses, the 2009 and 2010 cohorts were combined to increase the relatively small sample sizes that emerged for some of the courses when examining specific groups (e.g., students who were not in TA and who took both Academic Strategies and College Algebra).

Results showed that Strategies students were significantly more likely to succeed with a C or better than non-Strategies students in 13 of the 15 total courses (including all seven developmental education courses). The only courses that did not reveal a significant difference between these groups were College Algebra and Introduction to Biology for Majors. Analyses of grades within the TA and non-TA groups revealed that the significant grade advantage for Strategies students was evident across both TA and non-TA students for two courses, Writing I and American Federal Government. When examining grades within these groups, the differences in the other 11 courses showing an overall significant advantage for Strategies students were significant only for TA students. As with the persistence analyses, it is important to note that only a small number of non-TA students took Academic Strategies and in some cases, less than 30 students met the criteria for being in a comparison group (e.g., only 27 out of 8,192 students from both cohorts were not in TA and completed both Academic Strategies and Reading I). Thus, some of the findings that were not significant when examining the non-TA group may be significant with larger samples.

Conclusions

In summary, formative assessment revealed that student scores for all ten LASSI scales increased significantly at the 99% confidence level from the pretest to the posttest. Student scores on the Selecting Main Ideas scale had the highest mean increase from pretest to posttest.

In evaluating summative results, students who enrolled in Academic Strategies were more likely to persist from Fall-to-Spring, Fall-to-Second Fall, and through two full years than were students who did not enroll in the course. Further, 13 of 15 courses resulted in significantly higher rates of course success (C or better) for Strategies students than for non-Strategies students.

Summative findings regarding Academic Strategies for TA students and non-TA students suggest that TA students gain unique benefits from enrolling in the course. However, the relatively small number of non-TA students who have taken Academic Strategies likely limited the ability to detect significant benefits among non-TA students.

Taken altogether, these results suggest that during the 2009-2010 and 2010-2011 academic years, the Academic Strategies course was effective in increasing persistence from Fall to Spring and from year to year, increasing success in seven developmental and six gateway courses, and increasing the efficacy of student learning and study strategies. Statistical results are reported in the following tables.

Academic Strategies Results - Year 3

November 11, 2011

Formative Academic Strategies Course Analysis (Fall 2010 First-Time Freshmen Cohort)

LASSI Pretest and Posttest Mean Scores

LASSI Scales		Mean	Matched Sample Size (N)	Std. Deviation
Anxiety	Pretest	45.92	400	32.00
	Posttest	57.91	400	32.37
Attitude	Pretest	38.52	400	28.67
	Posttest	47.44	400	32.09
Concentration	Pretest	41.75	400	29.08
	Posttest	54.90	400	30.22
Information Processing	Pretest	51.53	400	29.54
	Posttest	65.18	400	27.75
Motivation	Pretest	51.87	400	30.25
	Posttest	61.43	400	30.50
Self-Testing	Pretest	45.00	400	30.41
	Posttest	58.69	400	31.29
Selecting Main Ideas	Pretest	46.16	400	29.90
	Posttest	63.47	400	27.94
Study Aids	Pretest	41.15	400	29.11
	Posttest	54.66	400	30.98
Time Management	Pretest	35.34	400	29.45
	Posttest	48.37	400	31.99
Test Strategies	Pretest	48.73	400	30.67
	Posttest	61.81	400	29.82

LASSI Pretest and Posttest Dependent t-test Results

LASSI Scales		<i>t</i>	Degrees of Freedom	<i>p</i> -value
Pair 1	Anxiety	-9.49	399	< .001
Pair 2	Attitude	-5.98	399	< .001
Pair 3	Concentration	-10.78	399	< .001
Pair 4	Information Processing	-10.74	399	< .001
Pair 5	Motivation	-7.84	399	< .001
Pair 6	Self-Testing	-9.53	399	< .001
Pair 7	Selecting Main Ideas	-13.47	399	< .001
Pair 8	Study Aids	-9.78	399	< .001
Pair 9	Time Management	-9.68	399	< .001
Pair 10	Test Strategies	-10.10	399	< .001

Summative Academic Strategies Course Analysis

Fall 2009 and Fall 2010 First-time Freshmen Cohorts

Cohort	TOTAL in Cohort*
Fall 2009 First-time Freshmen Cohort	4,001
Fall 2010 First-time Freshmen Cohort	4,191

*These values reflect the numbers from the Preliminary Fall Enrollment Report submitted to OSRHE.

Fall 2009 and Fall 2010 First-time Freshmen Tulsa Achieves (TA) Cohorts

Cohort	TOTAL in TA Cohort
Fall 2009 First-time Freshmen TA Cohort	1,207
Fall 2010 First-time Freshmen TA Cohort	1,358

Persistence

First-time Freshmen Cohort	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll Academic Strategies	
First Fall				
Fall 2009 First-time Freshmen	1,285		2,716	
Fall 2009 First-time Freshmen	TA	Non-TA	TA	Non-TA
	1,086	199	121	2,595
Fall 2010 First-time Freshmen	1,272		2,919	
Fall 2010 First-time Freshmen	TA	Non-TA	TA	Non-TA
	1,079	193	279	2,640
Fall to First Spring				
Fall 2009 First-time Freshmen ^a	88%		65%	
Fall 2009 First-time Freshmen ^{bd}	TA	Non-TA	TA	Non-TA
	89%	80%	54%	65%
Fall 2010 First-time Freshmen ^a	83%		63%	
Fall 2010 First-time Freshmen ^c	TA	Non-TA	TA	Non-TA
	86%	66%	67%	63%
Fall to Second Fall				
Fall 2009 First-time Freshmen ^a	58%		40%	
Fall 2009 First-time Freshmen ^{cd}	TA	Non-TA	TA	Non-TA
	61%	45%	33%	40%
Fall 2010 First-time Freshmen ^a	58%		39%	
Fall 2010 First-time	TA	Non-TA	TA	Non-TA
	61%	41%	47%	38%

First-time Freshmen Cohort	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll Academic Strategies	
Freshmen ^c				
Fall to Third Fall (includes completion of certificates and degrees)				
Fall 2009 First-time Freshmen ^a	39%		27%	
Fall 2009 First-time Freshmen ^{cd}	TA	Non-TA	TA	Non-TA
	41%	31%	21%	27%
Fall 2010 First-time Freshmen				

^aStatistically significant differences with a 99% confidence level.

^bPercentage for Strategies students is significantly higher than percentage for non-Strategies students for both TA and non-TA students, with a 99% confidence level.

^cPercentage for Strategies students is significantly higher than percentage for non-Strategies students only for TA students, with a 99% confidence level.

^dPercentage for TA Strategies students is significantly higher than percentage for non-TA Strategies students, with a 99% confidence level.

Success Rates: Course Grade Distributions (Fall 2009 and Fall 2010 Cohorts Combined)

Academic Strategies: ENGL 1003

Academic Strategies	Students Who Enrolled in Academic Strategies	
	Number	Percent
A	922	36.1%
B	534	20.9%
C	381	14.9%
C or Better	1,837	71.8%
D	179	7.0%
F	217	8.5%
AW/W/AU/WN/N	320	12.5%
I	4	0.2%
Total	2,557	100%

Note: Columns may not add up to 100% due to rounding.

Courses with Significant Differences in Success Rates (C or Better)

Basic Math: MATH 0003

Basic Math	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	118	17.8%	186	21.8%
DB	151	22.7%	187	21.9%
DC	137	20.6%	110	12.9%
DC or Better^{ab}	406	61.1%	483	56.6%
DD	44	6.9%	44	5.2%
DF	98	11.4%	117	13.7%
AW/W/AU/WN/N	116	14.2%	207	24.2%
I	0	0.0%	3	0.4%
Total	664	100%	854	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a DC or better in this course was significant for TA students (TA Strategies = 65.2% vs. TA non-Strategies = 45.6%) but not for non-TA students (non-TA Strategies = 48.8% vs. non-TA non-Strategies = 50.4%).

Note: Columns may not add up to 100% due to rounding.

Beginning Algebra: MATH 0013

Beginning Algebra	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	95	16.6%	195	18.6%
DB	109	19.0%	199	19.0%
DC	134	23.4%	174	16.6%
DC or Better^{ab}	338	59.0%	568	54.3%
DD	60	10.5%	71	6.8%
DF	86	15.0%	177	16.9%
AW/W/AU/WN/N	89	15.5%	229	21.9%
I	0	0.0%	2	0.2%
Total	573	100%	1047	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 95% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a DC or better in this course was significant for TA students (TA Strategies = 60.0% vs. TA non-Strategies = 46.4%) but not for non-TA students (non-TA Strategies = 53.6% vs. non-TA non-Strategies = 54.8%).

Note: Columns may not add up to 100% due to rounding.

Intermediate Algebra: MATH 0123

Intermediate Algebra	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	55	12.6%	126	18.8%
DB	112	25.6%	130	19.3%
DC	116	26.5%	143	21.3%
DC or Better^{ab}	283	64.6%	399	59.4%
DD	31	7.1%	35	5.2%
DF	56	12.8%	97	14.4%
AW/W/AU/WN/N	68	15.5%	141	21.0%
I	0	0.0%	0	0.0%
Total	438	100%	672	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 95% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a DC or better in this course was significant for TA students (TA Strategies = 65.4% vs. TA non-Strategies = 45.9%) but not for non-TA students (non-TA Strategies = 59.6% vs. non-TA non-Strategies = 60.2%).

Note: Columns may not add up to 100% due to rounding.

Reading I: ENGL 0903

Reading I	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	29	21.6%	45	16.9%
DB	35	26.1%	52	19.5%
DC	28	20.9%	37	13.9%
DC or Better^{ab}	92	68.7%	134	50.2%
DD	8	6.0%	19	7.1%
DF	8	6.0%	34	12.7%
AW/W/AU/WN/N	26	19.4%	80	30.0%
I	0	0.0%	0	0.0%
Total	134	100%	267	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant differences between Strategies and non-Strategies students on percentage earning a DC or better in this course were not significant when examining only TA students (TA Strategies = 70.1% vs. TA non-Strategies = 58.1%) and only non-TA students (non-TA Strategies = 63.0% vs. non-TA non-Strategies = 48.7%). Sample sizes were quite small for analyses within TA status.

Note: Columns may not add up to 100% due to rounding.

Reading II: ENGL 0913

Reading II	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	128	25.3%	199	24.3%
DB	115	22.7%	151	18.4%
DC	97	19.2%	100	12.2%
DC or Better^{ab}	340	67.2%	450	54.9%
DD	21	4.2%	25	3.0%
DF	50	9.9%	111	13.5%
AW/W/AU/WN/N	95	18.8%	233	28.4%
I	0	0.0%	1	0.1%
Total	506	100%	820	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a DC or better in this course was significant for TA students (TA Strategies = 71.2% vs. TA non-Strategies = 50.0%) but not for non-TA students (non-TA Strategies = 54.8% vs. non-TA non-Strategies = 55.5%).

Note: Columns may not add up to 100% due to rounding.

Writing I: ENGL 0923

Writing I	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	70	19.7%	90	15.7%
DB	82	23.1%	85	14.8%
DC	66	18.6%	100	17.4%
DC or Better^{ab}	218	61.4%	275	47.9%
DD	19	5.4%	37	6.4%
DF	45	12.7%	109	19.0%
AW/W/AU/WN/N	73	20.6%	153	26.7%
I	0	0.0%	0	0.0%
Total	355	100%	574	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a DC or better in this course was significant for both TA students (TA Strategies = 62.6% vs. TA non-Strategies = 45.3%) and non-TA students (non-TA Strategies = 58.4% vs. non-TA non-Strategies = 48.2%).

Note: Columns may not add up to 100% due to rounding.

Writing II: ENGL 0933

Writing II	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
DA	97	16.9%	184	19.1%
DB	154	26.9%	206	21.4%
DC	130	22.7%	165	17.1%
DC or Better^{ab}	381	66.5%	555	57.6%
DD	29	5.1%	51	5.3%
DF	66	11.5%	136	14.1%
AW/W/AU/WN/N	96	16.8%	222	23.0%
I	1	0.2%	0	0.0%
Total	573	100%	964	100%

^aPercentage of students who earned a DC or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a DC or better in this course was significant for TA students (TA Strategies = 67.0% vs. TA non-Strategies = 51.1%) but not for non-TA students (non-TA Strategies = 64.7% vs. non-TA non-Strategies = 58.3%).

Note: Columns may not add up to 100% due to rounding.

Composition I: ENGL 1113

Composition I	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
A	376	22.4%	692	26.0%
B	520	30.9%	686	25.7%
C	341	20.3%	412	15.5%
C or Better^{ab}	1237	73.5%	1790	67.1%
D	67	4.0%	116	4.4%
F	172	10.2%	296	11.1%
AW/W/AU/WN/N	204	12.1%	462	17.3%
I	2	0.1%	2	0.1%
Total	1682	100%	2666	100%

^aPercentage of students who earned a C or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a C or better in this course was significant for TA students (TA Strategies = 74.8% vs. TA non-Strategies = 58.1%) but not for non-TA students (non-TA Strategies = 63.1% vs. non-TA non-Strategies = 67.9%).

Note: Columns may not add up to 100% due to rounding.

General Biology for Non-Majors: BIOL 1114

General Biology for Non-Majors	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
A	55	17.5%	91	19.0%
B	98	31.2%	121	25.3%
C	77	24.5%	81	16.9%
C or Better^{ab}	230	73.2%	293	61.3%
D	30	9.6%	51	10.7%
F	26	8.3%	56	11.7%
AW/W/AU/WN/N	27	8.6%	77	16.1%
I	1	0.3%	1	0.2%
Total	314	100%	478	100%

^aPercentage of students who earned a C or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a C or better in this course was significant for TA students (TA Strategies = 73.3% vs. TA non-Strategies = 58.8%) but not for non-TA students (non-TA Strategies = 73.1% vs. non-TA non-Strategies = 61.5%).

Note: Columns may not add up to 100% due to rounding.

U.S. History 1492 to the Civil War Era: HIST 1483

U.S. History 1492 to the Civil War Era	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
A	96	18.2%	181	18.5%
B	131	24.9%	216	22.1%
C	103	19.5%	165	16.9%
C or Better^{ab}	330	62.6%	562	57.6%
D	43	8.2%	64	6.6%
F	55	10.4%	132	13.5%
AW/W/AU/WN/N	99	18.8%	216	22.1%
I	0	0.0%	2	0.2%
Total	527	100%	976	100%

^aPercentage of students who earned a C or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 95% confidence level.

^bSignificant differences between Strategies and non-Strategies students on percentage earning a C or better in this course were not significant when examining only TA students (TA Strategies = 62.5% vs. TA non-Strategies = 60.0%) and only non-TA students (non-TA Strategies = 63.3% vs. non-TA non-Strategies = 57.4%). Sample sizes were quite small for analyses within TA status.

Note: Columns may not add up to 100% due to rounding.

U.S. History - Civil War Era to the Present: HIST 1493

U.S. History - Civil War Era to the Present	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
A	240	21.4%	394	20.9%
B	267	23.8%	417	22.1%
C	243	21.6%	322	17.1%
C or Better^{ab}	750	66.8%	1133	60.2%
D	94	8.4%	123	6.5%
F	106	9.4%	219	11.6%
AW/W/AU/WN/N	172	15.3%	405	21.5%
I	1	0.1%	3	0.2%
Total	1123	100%	1883	100%

^aPercentage of students who earned a C or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a C or better in this course was significant for TA students (TA Strategies = 67.6% vs. TA non-Strategies = 57.6%) but not for non-TA students (non-TA Strategies = 60.3% vs. non-TA non-Strategies = 60.4%).

Note: Columns may not add up to 100% due to rounding.

American Federal Government: POLS 1113

American Federal Government	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
A	374	32.8%	674	30.9%
B	270	23.7%	540	24.7%
C	237	20.8%	345	15.8%
C or Better^{ab}	881	77.3%	1559	71.4%
D	61	5.4%	127	5.8%
F	91	8.0%	257	11.8%
AW/W/AU/WN/N	105	9.2%	238	10.9%
I	2	0.2%	3	0.1%
Total	1140	100%	2184	100%

^aPercentage of students who earned a C or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a C or better in this course was significant for both TA students (TA Strategies = 79.1% vs. TA non-Strategies = 61.9%) and non-TA students (non-TA Strategies = 63.2% vs. non-TA non-Strategies = 72.1%).

Note: Columns may not add up to 100% due to rounding.

Introduction to Psychology: PSYC 1113

Introduction to Psychology	Students Who Enrolled in Academic Strategies		Students Who Did Not Enroll in Academic Strategies	
	Number	Percent	Number	Percent
A	300	28.7%	540	27.1%
B	270	25.8%	464	23.3%
C	215	20.5%	335	16.8%
C or Better^{ab}	785	75.0%	1339	67.1%
D	61	5.8%	125	6.3%
F	75	7.2%	194	9.7%
AW/W/AU/WN/N	123	11.7%	331	16.6%
I	3	0.3%	6	0.3%
Total	1047	100%	1995	100%

^aPercentage of students who earned a C or better in this course was significantly higher for students who have taken Academic Strategies than those who have not, at a 99% confidence level.

^bSignificant difference between Strategies and non-Strategies students on percentage earning a C or better in this course was significant for TA students (TA Strategies = 75.8% vs. TA non-Strategies = 56.2%) but not for non-TA students (non-TA Strategies = 69.0% vs. non-TA non-Strategies = 67.9%).

Note: Columns may not add up to 100% due to rounding.

Summary of Course Grade Comparisons

Course	Students Who Enrolled in Academic Strategies vs. Students Who Did Not Enroll in Academic Strategies (*indicates significant for both TA and non-TA students)
<i>Developmental Education Courses</i>	
Basic Math	Significant Difference
Beginning Algebra	Significant Difference
Intermediate Algebra	Significant Difference
Reading I	Significant Difference
Reading II	Significant Difference
Writing I	Significant Difference*
Writing II	Significant Difference
<i>Gateway Courses</i>	
Composition I	Significant Difference
College Algebra	
General Biology for Non-majors	Significant Difference
Introduction to Biology for Majors	
U.S. History 1492 to the Civil War Era	Significant Difference
U.S. History - Civil War Era to the Present	Significant Difference
American Federal Government	Significant Difference*
Introduction to Psychology	Significant Difference