

2008–2009 Assessment Impact Report
UNDERGRADUATE TUTORIAL CENTER (UTC)
Division of Undergraduate Academic Programs
 (Last update: 7/16/09)

Unit Mission:

To contribute to NC State students’ academic success by hiring and training qualified students to provide effective, efficient tutorial services and by interacting with on and off-campus partners to share expertise about the tutoring field.

Philosophy:

To provide a variety of academic support opportunities that promote helping students become independent learners.

Objective I: Academic Support for Students

Students will be aware of and take advantage of tutorial services that are grounded in sound educational theory and as a result will perform better in their courses because they are taking responsibility for their own academic achievement.

Outcome 1: NC State students will feel welcomed and encouraged to use the different forms of academic assistance available to them.

	Fall 2008	Spring 2009
Total number of orientations held	206 (117 by UTC staff)	36 total 25 large+11small
Total number of students receiving orientations	714	400 total 382 large + 18 small
Average number of students/orientation	3.47	11.1 15.28 large, 1.6 small

Observation/Conclusion: For the past several years, orientations have been required for all students new to the tutoring by appointment programs. The intent is for students to feel welcome to the UTC while also understanding their academic support options and responsibilities. Until last fall, sign-up tutors conducted the orientations in small group format (3-5 students at a time). In the past this was an efficient use of resources at the beginning of the semester since the tutors were not busy. However, this format was proving to be increasingly problematic for several reasons: 1) each fall more students were requesting orientations, 2) students were required to schedule an appointment, so more appointment times were being dedicated to orientations, not tutoring 3) it was difficult to ensure that orientations were conducted effectively. As a temporary fix, between 9/18-10/15/08, orientations were only conducted by UTC staff to help preserve SU tutoring appointments.

Action/Decision: The UTC staff realized that the current format needed to be changed. SU tutors’ ability to conduct orientations varied, and their valuable time was needed for actual tutoring since the program had been growing in demand. In September 2008 the UTC staff conducted a brainstorming session with feedback from OASIS, FYC, and NSO staff. In spring 2009 the orientation format became large group, led by a UTC staff member. Students no longer needed to register to attend, which eliminated the problem

of orientation appointments being filled and then going unused. Our initial plan was to use clicker technology, but multiple glitches with the software created problems. Nevertheless, the new format was extremely popular and efficient for both students and staff. Small group sessions were still offered when a student was unable to attend a large session. One large benefit to the change in format is providing students consistent messages about services and policies. In addition, there is evidence that students are making wiser choices about their tutoring needs (see outcome 2). In anticipation of larger demand during the first few weeks of fall 2009, we plan to offer two large orientations per day (instead of only one, as in spring 2009).

Outcome 2: NC State students will use tutoring by appointment to the extent that budget and space allow.

	Fall 2007	Spring 2008	Fall 2008	Spring 2009
Total # of requests (WA+SU+group)	1075	958	1473	1174
# of WA + group requests	554	450	659	544
% (WA+group) requests/total requests	51.5%	47.0%	44.7%	46.3%
# of individual WA tutors	85	81	75	95
# of group tutors	n/a	14	19	15
# of individual WA assignments	366	284	265	290
# of group assignments	n/a	82	197	150
Total # of assignments		366	462	440
% of (WA+group) requests filled	66.1%	81%	70.1%	80.8%
# of Group contact hours	n/a	1488.25	2793.5	2190.75
Avg # of students per group	n/a	3.4	3.8	3.3
# of WA hours tutored	3,981	4,164.75	3,362.75	4,153.75
Avg. # of WA hours	10.9	14.7	12.7	14.3
# of group hours tutored	n/a	?	794.25	699.25
Avg. # of group hours	n/a	18.1	14.1	14.6
SU hours Used	725.3	672.7	799.6	743.9
SU no-show hours	68	113*	56	60.5
Total SU hours scheduled	793.3	785.9	909.5	870.75
Total SU hours offered	898.5	896	973.5	960
# of SU tutors	11	11	11	12
% of used SU appointments that were available	81%	75%	82%	77%
% of used SU appointments that were scheduled	91%	86%	88%	85%
% of scheduled SU appointments	88%	88%	93%	91%

Observation / Conclusion: The % of (WA+group requests)/total requests was significantly below 50% for both semesters. This has been a goal since the sign-up program began. The SU availability continues to expand as space restrictions allow, and students are being directed to use this service at orientations. Quite a few scheduled SU hours go unused that are not no-show hours. The reason is that students are not staying for their fully allotted time.

It is concerning that the tutor number of tutoring by appointment requests continues to increase significantly each academic year. In November 2008, Marcia and Barbie presented this information to the Associate Deans for Academic Affairs.

Action / Decision: Continue to promote the SU program at orientations. Continue to offer group and SU tutoring at the same level as budget allows. Change the default appointment time for SU appointments to

0.5 hour instead of 1 hour. Hopefully this change will eliminate the large number of 45/60 minute appointments (where students were staying the minimum time required to not accrue a no-show). The SU program will also open a day later next fall since appointments were not scheduled at the very beginning of the semester this year.

Due to budget cuts, the UTC will only offer tutoring by appointment in chemistry, math, and physics courses effective 7/1/09. In addition, MA 242 and CH 223 will only be served in the sign-up program.

Outcome 3: Students who embrace the UTC's philosophy will develop the skills necessary to succeed in the courses through tutoring by appointment experiences.

Observation/Conclusions: The LASSI was introduced to serve as a diagnostic measure to help identify areas in which students could benefit most from educational interventions as well as an evaluation tool to assess the degree of success of intervention programs or courses. All students using individual weekly assigned tutoring this year completed the LASSI (Learning and Study Strategies Inventory) and discussed their results with their tutor using the in-house Tutorial Goal Setting Report as a guide. Tutors also completed the LASSI and received training for how to provide feedback. Tutor and tutee reaction to the LASSI was mixed. Some found benefit to using the instrument and many others did not.

A second reason for implementing the LASSI was to use student results as a motivational control factor. Per IRB rules, only students who gave permission for their results to be used were considered in the study. Unfortunately, using LASSI results as a control factor did not demonstrate any significant findings.

Action/Decision: We will not continue to use the LASSI due to the expense of the instrument and lackluster results. We have revised the Tutorial Goal Setting Report that is used by the tutor/student so that they can target specific study skill strategies and habits in their tutoring sessions. The TGSR will be used in the session after the first test instead of at the beginning of the semester. This change will help tutors/tutees to be better able to identify study weaknesses. Tutor-training curriculum will continue to focus on educating tutors on how and why to use the TGSR effectively and to model study skills during tutoring sessions.

Outcome 4: Students will feel welcome and encouraged to attend SI and as a result will attend in large enough numbers to make SI more cost-effective than individual tutoring.

SI Attendance for Fall 2008 by Course							
	Enrollment	# Attending	Total Attendances	Sessions Offered	% Attending	Avg Att Per User	Avg Session Size
CH 101	2844	828	2821	297	29.1	3.41	9.50
CH 201	575	146	502	54	25.4	3.44	9.30
CH 221	691	222	914	118	32.1	4.12	7.75
TOTAL	4110	1196	4237	469	29.1	3.54	9.03

SI Attendance for Spring 2009 by Course							
	Enrollment	# Attending	Total Attendances	Sessions Offered	% Attending	Avg Att Per User	Avg Session Size
CH 101	1117	387	1651	199	34.6	4.27	8.30
CH 201	665	238	723	89	35.8	3.04	8.12
CH 221	729	178	915	71	24.4	5.14	12.89

TOTAL	2511	803	3289	359	32.0	4.10	9.16
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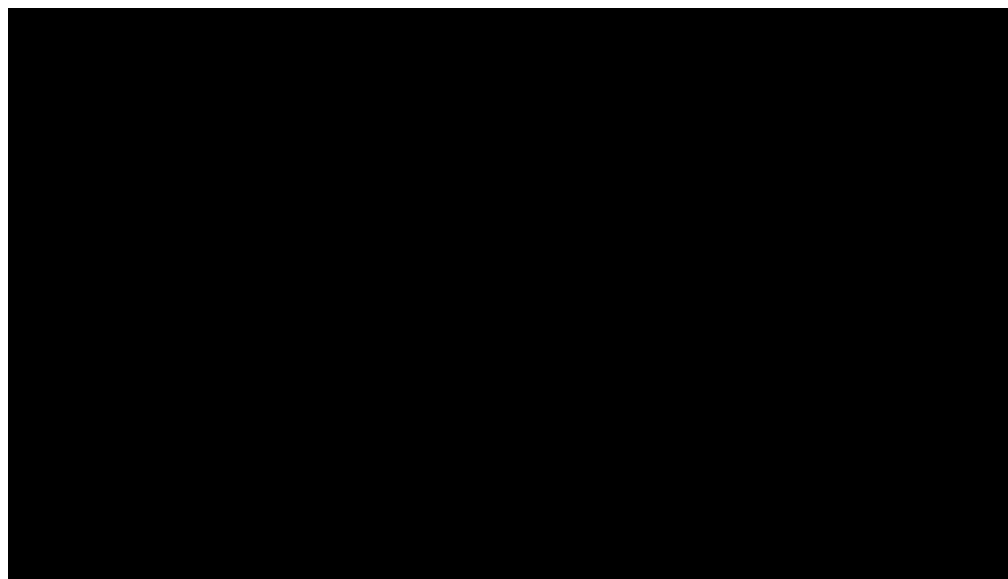
Observation/Conclusions: For SI to be more cost effective than individual tutoring for a given course, the average session size must be greater than or equal to 3.0 (since SI leaders are paid for approximately 9 hours of work per week and normally hold 3 sessions each week). All courses supported by the SI program this year met this goal, and actually far exceeded it. It is important to note that these high session size averages are not due to several large sessions (as in the past when SI leaders would hold test review sessions). Attendance has become more consistent throughout the courses and program in general.

Action / Decision: While we appear to be targeting the correct courses, we would still like to see a greater percentage of students in those courses choose to participate and those who do to return more often. We will continue to look for new ways to advertise the program and encourage attendance while maintaining the integrity of the program.

Outcome 5: Students who embrace the philosophy of SI will be satisfied with their experience and in general, students attending SI will have increased success in their SI course in comparison with non-attendees.

305 students responded to the online SI survey in Fall 2008. Responding to, "I am satisfied with the SI experience I had this semester." The average response was 3.59 out of 5, with 5 being "strongly agree." This is lower than expected and warranted an examination of students' comments. Upon further review, comments from students responding "disagree" or "strongly disagree" were generally unhappy with the SI format (as opposed to the SI leader). They typically noted that group work was not helpful and that they would have liked to work more problems during the sessions. While their suggestions were sometimes at odds with the SI philosophy, we recognize that advanced students may be correct in saying that some sessions are too slow paced. Returning leaders will work with the SI Coordinator in the fall semester to find an appropriate pace for sessions, particularly at the beginning of the semester.

166 students responded to the online SI survey in Spring 2009. Responding to, "I am satisfied with the SI experience I had this semester." The average response was 4.23 out of 5.



The small R Square value shows that much of the variability in students' scores cannot be explained by the

variables chosen (SAT, HSGPA, SI Visits). However, the small p-values for each suggests that the chances of obtaining these results if there were no relationship between course grade and these variables are extremely small. Therefore we may establish a model for predicting a student's grade, given his SAT score, High School GPA, and the number of times he attended SI for the course. This model is below:

$$\text{Grade} = 0.060966*(\# \text{ SI Visits}) + 1.177719 *(\text{HS GPA}) + .004299*(\text{SAT Math}) + .000243*(\text{SAT Verbal}) - 5.607705$$

This model suggests that for each additional SI visit, course grade will increase .060966 grade points. Therefore, a student attending 10 times may expect a .60966 increase above what they would receive if they never attended SI.

(Note: the regression was performed using data only from the 2991 students enrolled in SI supported courses for whom each of HS GPA, SAT scores, and course letter grades were available.)

Spring 2009

Regression Statistics	
Multiple R	0.531331
R Square	0.2823127
Adjusted R Squa	0.2793519
Standard Error	1.0561089
Observations	1218

ANOVA					
	df	SS	MS	F	Significance F
Regression	5	531.7593155	106.35186	95.351536	8.453E-85
Residual	1212	1351.823609	1.115366		
Total	1217	1883.582924			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-2.609004	0.42882636	-6.084056	1.569E-09	-3.450329	-1.767678	-3.450329	-1.767678
SI Attendance	0.0349226	0.008711814	4.0086533	6.479E-05	0.0178307	0.0520146	0.0178307	0.0520146
Prev GPA	0.7268607	0.04597864	15.80866	2.523E-51	0.636654	0.8170673	0.636654	0.8170673
HS GPA	0.2744211	0.114104614	2.4049952	0.0163218	0.0505563	0.4982858	0.0505563	0.4982858
SATV	-0.000641	0.000498433	-1.28519	0.1989716	-0.001618	0.0003373	-0.001618	0.0003373
SATM	0.0034406	0.000500582	6.873286	1.002E-11	0.0024585	0.0044227	0.0024585	0.0044227

The small R Square value shows that much of the variability in students' scores cannot be explained by the variables chosen (Previous GPA, SAT, HSGPA, SI Visits). However, the small p-values for each suggests that the chances of obtaining these results if there were no relationship between course grade and these variables are extremely small. Therefore we may establish a model for predicting a student's grade, given his SAT score, High School GPA, and the number of times he attended SI for the course. This model is below:

$$\text{Grade} = 0.0349226*(\# \text{ SI Visits}) + .2744211*(\text{HS GPA}) + .7268607*(\text{Previous GPA}) + .0034406*(\text{SAT Math}) - .000641*(\text{SAT Verbal}) - 2.609004$$

This model suggests that for each additional SI visit, course grade will increase .0349226 grade points. Therefore, a student attending 10 times may expect a .349226 increase above what they would receive if they never attended SI.

(Note: the regression was performed using data only from the 1218 students enrolled in SI supported courses for whom each of HS GPA, Previous GPA, SAT scores, and course letter grades were available.)

Observation / Conclusion: Data continues to show that even when controlling for predictive factors, SI attendance is strongly correlated with success in chemistry.

Outcome 6: Provide WSTS tutoring to as many students as possible within the limits of the program budget.

Writing & Speaking Tutorial Services

WSTS: Total Visits to all Five Locations				
	Fall 2007	Spring 2008	Fall 2008	Spring 2009
# of users	430	342	335	354
# of visits	810	685	522	690
Avg. visits/user	1.88	2.00	1.56	1.95
Efficiency (# hours used/# hours available)	76.51%	65.82%	77.76%	72.91%

WSTS: Total Visits at Ricks Hall (includes online tutoring)				
	Fall 2007	Spring 2008	Fall 2008	Spring 2009
# of users	254	271	248	258
# of visits	586	528	522	501
Avg. visits/user	2.23	1.95	2.10	1.94
Efficiency (# hours used/# hours available)	79.89%	72.43%	77.76%	79.25%
Online Sessions	20	16	9	8

WSTS: Total Visits at Avent Ferry Residence Hall				
	Fall 2007	Spring 2008	Fall 2008	Spring 2009
# of users	47	29	21	29
# of visits	66	45	25	30
Avg. visits/user	1.40	1.55	1.19	1.03
Efficiency (# hours used/# hours available)	67.76%	53.50%	40.50%	52.89%

WSTS: Total Visits at Lee Residence Hall				
	Fall 2007	Spring 2008	Fall 2008	Spring 2009
# of users	42	20	45	60
# of visits	47	26	58	72
Avg. visits/user	1.12	1.30	1.29	1.20
Efficiency (# hours used/# hours available)	55.14%	41.96%	43.06%	49.19%

Lee hall started late in fall 2007 semester

WSTS: Total Visits at FYC Commons				
	Fall 2007	Spring 2008	Fall 2008*	Spring 2009
# of users	87	62	54	75
# of visits	111	86	82	95
Avg. visits/user	1.28	1.39	1.52	1.27

Efficiency (# hours used/# hours available)	71.49%	49.84%	51.52%	69.11%
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Observation / Conclusion:

WSTS continued with steady growth in its main location, which led to a major policy shift. At the beginning of the fall 2008 semester, it was clear that graduate students were using over 20% of the available hours, and undergraduate students were having difficulty making appointments. After consulting with the Graduate School, the UTC made the decision to limit the services to undergraduate students only in November of 2008. Even though WSTS only served undergraduates in the spring, users, visits, and efficiency all went up.

* WSTS also experimented with having two tutors in FYC in fall 2008. One tutor worked 6-8pm while another worked 7-9pm. While both tutors and students said the situation was helpful for meeting the demand, the numbers do not bear out that data. However, FYC tutors did not gather data diligently during the last month of tutoring.

Online tutoring has been challenging. We do not have the funding to support dedicated tutoring hours, so we've been hesitant to advertise heavily fearing a flood of requests. While most submissions were responded to, the tutors feel that the tutoring is not as effective than face-to-face. When challenged with the choice of dedicating session hours to online tutoring in order to more fully serve the online population, we chose to eliminate online tutoring. While this will not be popular, the number of students affected will be very small. Also, the change will not affect many DE students. Only 2 of the 8 submissions were for DE classes, and those students were actually on-campus students taking DE classes.

Avent Ferry had multiple difficulties this year with staffing. One tutor who worked in Avent Ferry and in Ricks quit mid-semester. The replacement tutor in the spring quit 3 weeks before the end of the semester.

Action / Decision:

- Continue to monitor WSTS usage at FYC; consider another two-tutor shift in the future (but not for fall 2009).
- Cease online tutoring.
- Reinforce the importance of accurate data to tutors.
- Continue to serve only registered undergraduate students.
- Continue to advertise by visiting all ENG 100/101 courses at the beginning of each semester.
- Continue to partner with Residence Life to provide tutoring in FYC Commons, Lee, and Avent Ferry.

Outcome 7: Provide high-quality tutoring in WSTS.

End-of semester surveys

Scale: 1-5, 1= strongly disagree, 5=strongly agree		
Questions relevant to Outcome 6	Fall 2008 (n=39)	Spring 2009 (n= 36)
<i>I am satisfied with the WSTS tutoring that I received this semester.</i>	4.6	4.3

Overall, how well did WSTS meet your needs this semester?	4.3	3.8
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Staff Observations

All staff members were observed at least twice this semester. Staff meetings focused on how to be assertive, and tutors showed progress in that area.

Observation / Conclusion: Students remain generally satisfied with our services. In general, they find the service accessible, though some comments did say that they could not get appointments.

Action / Decision:

- The Coordinator and WSTS tutors agreed that information gleaned from the End of session surveys was not useful. No clear patterns emerged about what was working or not, therefore, they were discontinued. Instead, tutors were asked to encourage students to fill out the end of semester survey.
- Continue to observe and model techniques for tutors.

Outcome 8: Provide tutoring to as many students as possible in the PMTC within the limits of the program budget.

	Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009
# of attenders	750	632	182	716	543
# of attendances	3730	3607	1004	3373	2834
# hours staffed/week	130.5	135	60	135	124
Total # hours staffed	1714.75	1787.75	597.5	1737.5	1480
Efficiency (# hours used/# hours staffed)	345%	303%	283%	290%	297%

Observation / Conclusion: This year the PMTC attendance suffered due to lack of support from some physics faculty members. In the spring semester the PMTC opened later in the semester (after MLK Holiday) and closed earlier before student holiday breaks. It also opened an hour later each day (@11am) than in the past. The center has been a victim of budget cuts. Funding from the physics department and PAMS will not be available in the 2009-2010 academic year. In addition, the space in Fox was given away by the physics department in a space trade effective summer 2009.

Action / Decision: The PMTC will close after the first summer session 2009. Several former PMTC tutors will join the SU and/or group tutor staffs. The UTC will continue to explore opportunities to collaborate with departments. We will also proactively advertise departmental tutorial offerings when they are available.

Outcome 9: UTC’s tutorial services will have a diverse clientele.

Tutoring by Appointment (WA, SU, Group):

Fall 2008		
Ethnicity	Overall Undergraduate Enrollment (% of total registered enrollment)*	Number of Students Served (% of total)
White	19,385 (78.4%)	393 (58.7%)
African Am.	2,193 (8.9%)	195 (29.1%)
Asian Am.	1,264 (5.1%)	42 (6.3%)
Hispanic	635 (2.6%)	11 (1.6%)
Am. Indian	132 (0.5%)	5 (0.75%)
Not Reported	741 (3.0%)	24 (3.58%)
Gender		
Female	10,840 (43.8%)	422 (63%)
Male	13,901 (56.2%)	248 (37%)
Spring 2009		
Ethnicity	Overall Undergraduate Enrollment (% of total registered enrollment)*	Number of Students Served
White	18,220 (78.4%)	328 (60.1%)
African Am.	2,023 (8.7%)	154 (28.2%)
Asian Am.	1,174 (5.1%)	26 (4.8%)
Hispanic	590 (2.5%)	14 (2.6%)
Am. Indian	118 (0.5%)	5 (0.9%)
Not Reported	719 (3.1%)	19 (3.5%)
International	400 (1.7%)	
Gender		
Female	10,250 (44.1%)	335 (61.4%)
Male	12,994 (55.9%)	211 (38.6%)

* Totals represent all undergraduate students. The SU and WA Programs target only first and second year undergraduate students.

Supplemental Instruction:

Fall 2008			
Ethnicity	Percentage of Students Enrolled in SI-supported Sections	Percentage of SI participants	Average Number of Sessions
White	78.1	75.8	3.72
African Am.	7.9	10.1	3.93
Asian Am.	7.5	6.5	3.43
Hispanic	2.7	3.3	2.46
Am. Indian	0.6	0.7	2.13
Unreported	3.1	3.2	4.14
Gender			
Female	42.0	50.3	3.91
Male	58.0	49.7	3.45

Spring 2009			
Ethnicity	Percentage of All Students Enrolled in SI-supported Sections	Percentage of all SI participants	Average Number of Sessions
White	74.3	73.8	4.34
African Am.	10.6	11.5	3.86
Asian Am.	7.5	7.1	4.36
Hispanic	2.5	2.9	3.93
Am. Indian	0.7	0.3	18
Unreported	4.4	4.4	3.14
Gender			
Female	52.0	60.0	4.58
Male	48.0	40.0	3.75

PMTC:

Fall 2008		
Ethnicity	Overall Undergraduate Enrollment (% of total enrollment)*	Number Served (% of total) n=716
White	19,385 (78.4%)	513 (71.6%)
African Am.	2,193 (8.9%)	100 (14.0%)
Asian Am.	1,264 (5.1%)	44 (6.1%)
Hispanic	635 (2.6%)	23 (3.2%)
Am. Indian	132 (0.5%)	9 (1.2%)
Not Reported	741 (3.0%)	27 (3.8%)
Gender		
Female	10,840 (43.8%)	335 (46.8%)
Male	13,901 (56.2%)	381 (53.2%)
Spring 2009		
Ethnicity	Overall Undergraduate Enrollment (% of total enrollment)*	Number Served (% of total) n=543
White	18,220 (78.4%)	392 (72.2%)
African Am.	2,023 (8.7%)	76 (14.0%)
Asian Am.	1,174 (5.1%)	35 (6.4%)
Hispanic	590 (2.5%)	13 (2.4%)
Am. Indian	118 (0.5%)	3 (0.6%)
Not Reported	719 (3.1%)	24 (4.4%)
Gender		
Female	10,250 (44.1%)	280 (51.6%)
Male	12,994 (55.9%)	263 (48.4%)

* Totals represent all undergraduate students. The PMTC targets only 100 and 200-level PY and MA courses.

Writing and Speaking Tutorial Services:

Fall 2008		
Ethnicity	Overall Enrollment (% of total enrollment)*	Number Served (% of total)
White	19,385 (78.4%)	152 (47.8%)
African Am.	2,193 (8.9%)	105 (33.0%)
Asian Am.	1,264 (5.1%)	32 (10.1%)
Hispanic	635 (2.6%)	10 (3.1%)
Am. Indian	132 (0.5%)	4 (1.3%)
Not Reported	741 (3.0%)	15 (4.7%)
Gender		
Female	10,840 (43.8%)	199 (62.6%)
Male	13,901 (56.2%)	119 (37.4%)
Spring 2009		
Ethnicity	Overall Enrollment (% of total enrollment)*	Number Served
White	18,220 (78.4%)	199 (56.2%)
African Am.	2,023 (8.7%)	82 (23.2%)
Asian Am.	1,174 (5.1%)	43 (12.2%)
Hispanic	590 (2.5%)	11 (3.1%)
Am. Indian	118 (0.5%)	0 (0%)
Not Reported	719 (3.1%)	19 (5.4%)
International	400 (1.7%)	
Gender		
Female	10,250 (44.1%)	244 (68.9%)
Male	12,994 (55.9%)	110 (31.1%)

Observation/Conclusion: All programs met or exceeded the goal that they would have a diverse clientele as measured by gender and ethnicity.

Action / Decision: Continue to promote diversity among staff and users.

Objective II: Tutor Training and Development

A diverse group of UTC tutors will learn and embrace research-supported tutoring methods and implement those methods to help their tutees become independent learners.

Outcome 1: The UTC will employ a diverse group of qualified tutors.

Fall 2008		
Ethnicity	All undergraduates with GPA >= 3.0* (%)	Tutors and SI Leaders employed by the UTC (%) n=146
White	7,154 (74.1%)	109 (74.7%)
African Am.	493 (5.1%)	5 (3.4%)

Asian Am.	540 (5.6%)	27 (18.5%)
Hispanic	211 (2.2%)	3 (2.1%)
Am. Indian	25 (0.3%)	1 (0.7%)
Not Reported	228 (2.4%)	1 (0.6%)
Gender		
Female	4,313 (44.8%)	83 (56.8%)
Male	5,338 (55.3%)	63 (43.2%)

Spring 2009		
Ethnicity	All undergraduates with GPA >= 3.0* (%)	Tutors and SI Leaders employed by the UTC (%) n=153
White	8,866 (82.3%)	106 (69.3%)
African Am.	602 (5.6%)	5 (3.3%)
Asian Am.	680 (6.3%)	32 (20.9%)
Hispanic	258 (2.4%)	4 (2.6%)
Am. Indian	36 (0.3%)	0 (0%)
Not Reported	334 (3.1%)	6 (3.9%)
Gender		
Female	5,434 (50.4%)	70 (47.3%)
Male	4,342 (49.6%)	78 (52.7%)

*It is a requirement of employment for students to have a minimum GPA of 3.0 and at least a B+ in the course(s) they wish to tutor.

Observations/Conclusions: The UTC continues to actively embrace the regulation adopted by North Carolina State University in June 2007 entitled "Discrimination and Harassment Prevention and Response Training." This regulation seeks to provide each employee within NC State with important information on how to maintain a discrimination-free work environment and how to identify and address discrimination and harassment if an incident occurs. All University employees are required to participate in this training within six months of when employment begins. The UTC staff works with Amy Circosta in the OEO office to develop a training specific for undergraduate tutors, including case studies. Beginning this year the training was required for current ECI 210 students as an assignment for class. Tutors could choose to attend a one-hour workshop facilitated by Amy or complete the online training module (<http://www.ncsu.edu/project/oao-training/harassment/>) and complete a one page paper describing how the information presented in the training applies to your job as a tutor. This assignment ties in well with the communications and culture lesson to better inform tutors of their responsibilities towards protected classes.

The % of African-American tutors has dropped a little this year compared to eligible pool percentage.

It is interesting to note that the UTC had its highest number of tutor employees ever in the 2008-2009 academic year.

Action/Decision: Continue to monitor and consider ways to recruit and retain a diverse pool of qualified tutors, particularly African-American tutors. Continue to present to the National Society of Black Engineers to recruit tutors and advertise our services.

<p>Outcome 2: The UTC will offer continued employment opportunities to tutors and SI leaders with demonstrated competence.</p>

Semester	Number of students enrolled in ECI 210	Returned in a subsequent semester	Not rehirable
Spring 2008	39	23 (58.9%)	0
Summer 2008	14	7 (50%)	1
Fall 2008	42	28 (66.7%)	7

Observations/Conclusions: The ECI 210 course is considered to be a semester-long interview process. All ECI 210 instructors submit rehire recommendations for their students. New beginning with the spring 2009 recruitment: All students interested in employment were required to attend an information session and complete an application. A change was made in the spring 2009 information sessions to require that all applicants commit to tutoring two subsequent semesters, if selected.

Once new student tutors successfully complete ECI 210, they have the opportunity to apply for SI leader and tutoring positions in SU, WSTS, and group programs. Seasoned tutors and SI leaders have the opportunity to apply for supervisory responsibilities. Experienced senior tutors are hired to conduct tutor/SI leader observations and facilitate workshops. The mentors became skilled in assessing others' performance as well as their own. They work closely with professional staff to develop and implement ideas while honing professional skills like leadership, time management, and assertiveness.

Additional challenges after the first semester of tutoring include learning to assist with multiple subjects during a short-time span and working with a larger number of students with various levels of understanding. The new group tutoring program provided an additional opportunity for tutors to gain facilitation, leadership, and enhanced tutoring skills other than SI. Several tutors worked in multiple programs. UTC t-shirts are awarded to returning tutors each semester as a "thank you" for their hard work.

The tutor of the semester award incentive was offered again this spring. One award was given for the WA program and one for the group tutoring program.

Action/Decision: Continue to monitor the percentage of returning ECI 210 tutors to see if the information sessions and two-semester commitment raise the rate.

Outcome 3: Tutors and SI leaders will improve their understanding of course material.

From tutor self-evaluation form:

Scale: 1-5, 1 = strongly disagree, 5 = strongly agree		
	Fall 2008	Spring 2009
<i>1. I have a good understanding of the subjects that I tutor.</i>		
<i>ECI 210 tutors</i>	4.57	4.58
<i>Weekly Assigned returning tutors</i>	4.59	4.68
<i>Group tutors</i>	4.53	4.64
<i>Sign-up tutors</i>	4.5	4.72
<i>SI Leaders</i>	4.3	5.0
<i>WSTS tutors</i>	4.62	4.42
<i>2. My own knowledge of the subject improved as a result of tutoring.</i>		
<i>ECI 210 tutors</i>	4.71	4.62
<i>Weekly Assigned returning tutors</i>	4.66	4.68
<i>Group tutors</i>	4.00	4.27
<i>Sign-up tutors</i>	4.9	4.91

<i>SI Leaders</i>	4.4	5.0
<i>WSTS tutors</i>	5.0	5.0

Observation / Conclusion: Overall, student tutors agree that tutoring has improved their understanding of the course material. The PMTC tutors did not complete a self-evaluation in spring 2009 since the program was closing.

Action / Decision: Continue to monitor.

Outcome 4: Tutors and SI leaders will improve their communication skills.

From tutor self-evaluation form:

Scale: 1-5, 1 = strongly disagree, 5 = strongly agree		
	Fall 2008	Spring 2009
<i>I have improved my ability to communicate as a result of tutoring.</i>		
<i>ECI 210 tutors</i>	4.25	4.56
<i>Weekly Assigned returning tutors</i>	4.56	4.59
<i>Group tutors</i>	4.33	4.36
<i>Sign-up tutors</i>	4.4	4.63
<i>SI Leaders</i>	4.50	4.57
<i>WSTS tutors</i>	4.75	4.86
<i>In general, my abilities as a tutor have improved this semester.</i>		
<i>ECI 210 tutors</i>	4.75	4.77
<i>Weekly Assigned returning tutors</i>	4.52	4.45
<i>Group tutors</i>	4.33	4.64
<i>Sign-up tutors</i>	4.6	4.63
<i>SI Leaders</i>	4.40	4.86
<i>WSTS tutors</i>	4.75	4.57

Observation / Conclusion: All tutors and SI leaders agree or strongly agree that they have improved their ability to communicate as a result of their UTC experiences.

Action / Decision: Continue to review and revise self-evaluations so that tutors can reflect on their own development. All tutors will set and review goals each semester.

Outcome 5: SI leaders will improve their group facilitation skills.

From SI Leader Self Evaluation:

Scale: 1-5, 1 = strongly disagree, 5 = strongly agree		
	Fall 2008	Spring 2009
<i>I have improved my ability to facilitate groups as a result of leading SI sessions.</i>	4.50	4.75

Observation / Conclusion: Group facilitation is a skill that SI leaders consistently report gaining through their SI experiences. Usually all leaders feel comfortable leading sessions by the end of their first semester and have good group management skills.

Action / Decision: Continue to monitor and measure.

Outcome 6: Tutors by appointment will improve their awareness and use of study skills strategies during tutoring sessions.

Scale: 1-5, 1 = strongly disagree, 5 = strongly agree		
	Fall 2008	Spring 2009
<i>I promote good study skills with my students by discussing effective behavior.</i>		
<i>ECI 210 tutors</i>	4.17	4.0
<i>Weekly Assigned returning tutors</i>	4.37	4.18
<i>Sign-up tutors</i>	n/a	4.54
<i>I use activities in my sessions/interactions that help students develop better study skills.</i>		
<i>ECI 210 tutors</i>	3.78	3.64
<i>Weekly Assigned returning tutors</i>	3.67	3.95
<i>Sign-up tutors</i>	4.7	4.0

Observation / Conclusion:

The long-term goal of improving study skills often comes into conflict with the short-term goal of completing homework. Tutors are challenged with this disparity. Effectively assisting with study skills takes practice and determination. UTC staff continue to add new material in ECI 210 and continued trainings to give tutors structure for how to keep tutoring sessions from becoming solely focused on immediate webassign work.

Action / Decision: Continue to monitor.

Outcome 7: ECI 210 will be an effective course for tutor training.

ECI 210 Course Evaluation Results		
Scale: 1-5, 1 = strongly disagree, 5 = strongly agree		
Course Objectives: “The ECI 210 course helped me or encouraged me to:”	Fall 2008 Response average	Spring 2009 Response average
Learn about the Undergraduate Tutorial Center’s policies and procedures.	4.37	4.60
Understand the tutor-student relationship and my role as a tutor.	4.71	4.69
Differentiate between direct and indirect tutoring techniques.	4.39	4.21
Use positive reinforcement in my tutoring sessions.	4.56	4.51
Use questioning in my tutoring sessions.	4.69	4.79
Encourage tutee verbalization through listening in my tutoring sessions.	4.36	4.54

Encourage my tutees to become independent learners.	4.54	4.40
Analyze my strengths and areas of improvement as a tutor.	4.45	4.46
Encourage my tutees to set goals.	4.07	4.04
Understand my learning preferences and how they impact my work with students.	4.36	4.25
Employ assertive approaches to dealing with problems within the tutoring relationship.	4.10	3.96
Increase awareness for working with student differences.	4.33	4.23
Apply strategies that accommodate student differences.	4.33	4.02
Promote study skills with my tutees by modeling and discussing effective behavior.	4.28	4.42

Observation / Conclusion: The coursepack was revised to help train tutors how to effectively use 2 hours/week of tutoring (i.e. how to balance short-term and long-term goals) and how the tutor should use the LASSI results when working with tutees. All students were required to take the LASSI as part of their course grade. Students were required to participate in a Discrimination and Harassment Prevention workshop as part of their course grade, so training hour credit for the course was increased from 18 to 19 hours. Also, the order of lesson plans was changed to address study skills before questioning/student verbalization. An extra class focusing on strategies around LASSI results was added. Instructor discussion focused on strengthening the structure section of the course.

Action / Decision: Continue weekly instructor meetings and course evaluations and monitor effective strategies to meet course objectives. Focus currently on revising structure component of course material. Due to the expense of the LASSI and the lack-luster response from tutors, we will discontinue using the LASSI. To address the concern that tutors need more training at the beginning of the semester, we will pilot ½ semester intensive section in fall 2009. Add a rubric for mid-semester assessment.

Outcome 8: UTC staff will provide ample effective training and leadership opportunities for tutors.

Certification Level:	2007-2008 academic year	2008-2009 academic year
Level I (10 training hours, 25 tutoring hours)	45 (25%)	49 (24.1%)
Level II (20 training hours, 50 tutoring hours)	57 (31.7%)	71 (34.9%)
Level III (30 training hours, 75 tutoring hours)	58 (32.2%)	64 (31.5%)
Tutor quit during the semester	4 (2.2%)	2 (.98%)
Tutor was not rehireable at the end of the semester based on supervisor recommendation	16 (8.9%)	17 (8.3%)
Total:	180 (100%)	203 (100%)

Observation / Conclusion: Last summer we changed the number of training hours of ECI 210 from 18 to 19, since the OEO discrimination and harassment prevention training was added as a course requirement. In addition, ECI 210 students were given the opportunity to complete one additional hour of training outside of course requirements. Several students chose this option in order to be eligible to attain level II certification at the end of their first semester of employment.

This year the Tutor Mentor (TM) peer supervision program was continued in its second year under the supervision of Dana. The program had four tutor mentors, who, in addition to tutoring, were responsible for setting up and conducting two 1-hour observations with each of their tutors. Each of the observations was followed by a half hour discussion, where the tutor mentors worked with the tutors to diagnose and evaluate tutoring strengths and potential areas for improvement. In addition, each TM led two core group meetings each semester. These were required opportunities for returning tutors to receive training and support.

The group tutoring program added a peer supervisor, following the model for SI. The peer supervision model has been successful in providing an additional structure for training, supervision, and leadership development.

Action/Decisions: Continue peer supervisors next year in SI, group, and WA programs. Add objective next year to measure impact of UTC learned skills for graduating tutors. Continue to refine tutor observation sheets and self-evaluation forms to improve feedback opportunities. Develop portfolios for tutors to monitor growth and development.

Objective III: On-Campus Initiatives

To develop partnerships and share expertise with on-campus constituents

<p>Outcome 1: The UTC staff will develop partnerships with members of the campus community.</p>
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Observation/ Conclusion: Partnerships in 2008-2009 included:

University Housing: Writing and Speaking Tutorial Services partners with University Housing to provide tutors in the residence halls. Housing provided the space and money to pay the tutors while the UTC provides training and supervision. They work cooperatively to advertise the services. Marcia regularly meets with Housing to inform and collaborate with staff members.

Physics and Math Departments: The UTC partnered with physics department and the College of Physical and Mathematical Sciences (PAMS) to offer the PMTC. The UTC hired, trained, and supervised all tutoring personnel while the physics department and PAMS provides space, equipment, and money for the salaries of the tutors. This was a win-win situation since the UTC gains much needed space and funding while the physics department is alleviated the expense of a full-time manager. Unfortunately, this partnership has been a victim of budget cuts effective 7/1/09. The UTC also partnered with the math department to assist with training MA TAs in fall 2008.

Wolfpack Welcome Week: This was the second year we joined with other NC State units for Wolfpack Welcome Week. We conducted a workshop entitled Successful Study Strategies for College for incoming freshmen as part of the WWW academic day.

Action/Decisions: Continue to monitor and foster partnerships.

Outcome 2: The UTC staff will share their expertise in content area with members of the campus community through consultations, presentations, and workshops.

FALL 2008					
	Consultations	Classroom Presentations	Student Group Presentations	Faculty Presentations	Fall Total
# of Events	2	9	23	5	39
# of Attendees	3	229	1187	125	1544
SPRING 2009					
	Consultations	Classroom Presentations	Student Group Presentations	Faculty Presentations	Spring Total
# of Events	1	7	6	0	14
# of Attendees	1	255	135	n/a	391

Observations / Conclusions: The majority of presentations are offered by Writing and Speaking Tutorial Services. WSTS continued to offers a number of presentations and workshops to assist participants with a variety of writing and speaking topics from introducing transfer students to writing in the academy to handling ethical arguments for beef cattle management seniors.

Other presentations this year included an academic support workshop on successful study strategies for college at the Wolfpack Welcome Week and two workshops on effective questioning and study skills strategies for the Certificate for Accomplishment in Teaching (CoAT) graduate training program.

Students and faculty also scheduled one-on-one consultations with UTC staff member to address individual concerns.

Actions / Decisions: Continue to monitor all offerings.

Objective IV: Engaging in the Professional Field

To engage in the professional field through promotion and development of UTC tutor training products as well as active participation in other professional development opportunities.

Outcome 1: The UTC staff will promote and develop the UTC tutor-training products.

Tutor training product	# of items sold (between 5/1/08-4/30/09)
A Look at Productive Group Learning Sessions (DVD)	6
A Look at Productive Group Learning Sessions (VHS)	1
A Look at Productive Tutoring Techniques (DVD)	50
A Look at Productive Tutoring Techniques (VHS)	1
Users' Guide	40

Observations/Conclusions: Although sales did decline this past year, the UTC's tutor training products continue to sell and be highly respected in the tutoring field. It is suspected that the slow economy contributed to the decline in sales.

Our outside vendor, Allied Vaughn, merged with Next Generation Media in fall 2008. Some staffing changes have taken place in their office, although our contractual arrangement with them remained the same. Nevertheless, NC State's Purchasing Office requires that we submit a new contract and justification for their services this summer. This process is currently in progress.

This year it was decided to stop selling the tutor-training products in VHS format due to the low sales and rising cost of duplication.

In addition, our CRLA-certified program continues to serve as a model to other institutions. We frequently serve as consultants for institutions in learning about the certification process. Our online study skills handouts are referenced by many institutions.

Between 5/1/08 and 4/30/09, our products sold to 58 institutions in 27 different US states, as well as two institutions in British Columbia, Canada, one institution in Ontario, Canada, and one institution in Athens, Greece.

Actions/Decisions: The justification memorandum and contract between Next Generation Media and Reg.Net (our outside vendors) will be written and submitted to the Purchasing Office for approval for 2009-2010. (It was approved and signed on 6/26/09). Under Marcia's leadership, the staff will continue to work on producing new marketable tutor training material.

Outcome 2: The UTC staff will share and develop their expertise in the tutoring field through professional development opportunities.

FALL 2008*		
	Professional Presentations/Participation	Fall Total
# of Events	2	2
# of Attendees	30	30
SPRING 2009*		
	Professional Presentations/Participation	Spring Total
# of Events	0	
# of Attendees	N/A	

Observations/Conclusions: A complete listing of professional development highlights is listed in the 2008-2009 UTC annual report. *Note that professional development opportunities were not available in spring 2009 due to the state budget freeze on travel.

Actions/Decisions: Continue to monitor professional development opportunities as budget allows and share information as requested.

Appendix: Special Initiatives

I. Office Technology Thanks to Marcia's amazing talents, this year the UTC continued to use and enhance an in-house computer application using Microsoft Access. Enhancements have included new report features and a feature to download student's schedules from the online application, as well as improved speed of the program.

The new online application has been improved for the 2009-10 academic year. New features include a pop-down menu for course request and a limit of one online submission per student.

We are anticipating a new version of Tutortrac, our online tutoring schedule package, to be implemented in spring 2010.

II. Pilot study of tutor-student communication in WSTS

Marcia Toms, associate director, has enrolled in a PhD program for educational research. As part of that course work, she completed a pilot qualitative study addressing the nature of communication between students and tutors. As the time allowed for this project was minimal, the study was limited in nature.

Study background: A fundamental tenet of writing centers is the use of indirect techniques to draw out student knowledge. Unfortunately, little research has been done on the method despite composition research which suggests that students often misunderstand feedback on their work.

Method: One tutor-student dyad was studied. A tutoring session was video-recorded and observed. Then the observer met with the student and tutor individually to watch the session. The participants were encourage to talk-aloud while watching the video to discuss what they we trying to say and how they interpreted the other's comments. Transcripts of the session and each interview were then created and coded for themes.

Preliminary findings: Three major sets of data emerged to help understand how the tutor and student communicated in the session: student and tutor goals, indirect techniques, and an instance of miscommunication

Student and tutor goals:

The student was quiet at the beginning of the session and said in the interview that he was purposefully trying to be quiet to see what the tutor thought he should do. This silence was distressing to the tutor who was trying to use indirect techniques to get the student to do more of the work. The tutor feared that she was doing too much for the student.

Despite the strategic nature of the student's silence, the observer noted how pleased he looked with himself when he broke with his plan and he came up with new ideas during the session. This importance of ownership of ideas came up frequently during the interview, as he pointed out often "it was I who came up with that point."

Use of indirect techniques

The student seemed ambivalent about the use of indirect techniques. At first he seemed bored with the process, but agrees that the tutor's use of questions helped him think through his writing and thought processes. However, there was one clear example of indirect techniques not working. Early in the session the tutor asks the student, "where is your thesis?" to see if he had his organization under control. While the tutor was trying to use the model indirect techniques discussed in training, the student's reaction was not expected. The student said, "I sort of wish she had found it, and not had asked me where it was. It sort of worried me that it wasn't evident what the thesis was...it should be obvious." His fears are mitigated somewhat since the tutor said the thesis was good. This type of reaction shows that the tutor's intent is not always understood by the student.

Another miscommunication

Besides the miscommunication about the thesis, there was one other major miscommunication in the data. At one point in the session, the student said, “We talked a lot in class about making sure after we have a quotation we analyze the quotation specifically instead of just talking about some random thing that is somewhat related and also about introducing them in varied ways.” The tutor picked up on only the last part of that statement, however. She checked with the student about each of his quotation integrations, but not his analysis. Even while watching the session for a second time, the tutor felt the quotation discussion was successful. The student, however, in the interview mentions that he did not agree about the success of that part of the session:

I wish when we had talked about the quotations, instead of working on the beginning of the quotations, we could have worked on how we analyzed them. Because that's what... because how you introduce them doesn't really matter in the end. It's just mechanical, while how you analyze them is how you think about them.

The student, however, did not assert his desire to work on analysis in the session and therefore that desire was not fulfilled.

Use of the study findings: Since the study was completed, Marcia and the WSTS tutors have had multiple conversations about when and why to use indirect techniques. The group also is more aware of the sometimes tension between tutor and student goals. Marcia is also currently revising the ECI 210 curriculum for writing and speaking tutors to address some of the types of miscommunication that arise.

In addition to the findings of this study, the work suggests the kind of useful information that can be gleaned if staff time and resources are devoted to assessment.

III. Senior Tutor Essay submitted for CRLA’s 2009 Tutor of the Year award:

Tutoring: The Door to Triumph

By: Genevieve Pike

“Grab it, slam it, boot it,” the steps of the bimolecular elimination mechanism as taught to me by my first tutee Whitney. I asked Whitney what she even needed me for when she was the one teaching me. I have shared that learning device with every organic student I have worked with since then, and they continue using it session after session. That is one of my tutoring goals, to make the student an independent learner. I frequently remind my tutees of this, saying I don’t want you to feel like you need me anymore. Whitney is now an independent learner after grabbing, slamming, and booting through organic with me and then all the way to an A+ in biochemistry by herself.

Tutoring sets students up for walking through the portal of success, by providing them the tools necessary to excel in all of their classes, not just the one they are tutored in. As a tutor, I try to instill confidence in my tutees. Students will come in extremely frustrated over their homework problems, because they can’t figure out how to start or where they went wrong. Together we restart the problem and look at

similar examples in their notes and textbooks. A few questions about why they did that step and what are they trying to figure out, and the light bulb comes on as they gain the confidence to take on any problem in the world.

Tutoring not only serves as the portal to success for the students, but as a tutor, I gain as much from grab, slam, and boot as the students do. Of course tutoring keeps me fresh on my basic subjects like chemistry and math, but it helps me become a better leader and a better person. Tutoring introduces me to a diverse group of students, and I get the opportunity to learn how to work with each one of them. I also, get to learn from my peer tutors as we all try to help our students become independent and confident. Sometimes I pass a former tutee on campus and they tell me how well they are doing in an upper level course because they still make study guides like we did together when they were in tutoring. Times like that is why tutoring leads to success for all those involved.

For over two years, I have been fortunate enough to see students who I have worked with at the Undergraduate Tutorial Center learn such things as complex organic mechanisms, partial derivatives, and thermodynamics. The best part is that I didn't teach them the material or simply tricks to scrape by on a test. All I did was demonstrate how to learn it on their own, instilling confidence so that they can be triumphant in any subject. Now students and I can grab knowledge, slam dependence, and boot uncertainty because tutoring is our portal to success.