

**2007–2008 Assessment Impact Report**  
**UNDERGRADUATE TUTORIAL CENTER**  
**Division of Undergraduate Academic Programs**  
 (Last update: 6/2/08)

**Unit Mission:**

The Undergraduate Tutorial Center (UTC) contributes to NC State students’ academic success by hiring and training qualified and motivated students to provide effective and efficient tutorial services and by interacting with on and off-campus partners to share expertise about the tutoring field.

**Objective I: Tutoring**

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.

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**Outcome 1:** NC State students will be aware of the different forms of academic assistance available to them.

	Fall 2007	Spring 2008
Total number of orientations held	139	113
Total number of students receiving orientations	608	430
Average number of students/orientation	4.4	3.8

**Observation/Conclusion:** Orientation sessions for students new to tutoring by appointment are required during the fall and spring semesters. The information and format at these sessions was revised to better educate participants about the various opportunities available to them, including actively learning how to make a sign-up appointment. Orientation leaders are trained to make the orientations interactive so that students feel welcomed and valued. During the fall 2006 semester orientations began being scheduled using Tutortrac. UTC staff conducted many of the orientations in mid-fall since the sign-up tutors were needed for tutoring appointments.

We have advertised our services in many ways this year, including through parent and adviser handbooks, the stateadviser listserv, faculty emails, classroom visits, and an updated website, as well as training OCs and staffing NSO info fairs and various parent orientations throughout the year. We also had a visible presence at Wolfpack Welcome Week. A UTC t-shirt was designed and given to all returning tutors in spring 2008 to help promote our services.

**Action/Decision:** Continue these efforts. This summer the UTC will be represented in NSO’s Handbook for Incoming Students. Allowing students to schedule their orientation appointments via Tutortrac was extremely beneficial for both students and office staff. Office staff time devoted to scheduling appointments was significantly reduced and students were able to schedule/cancel appointments at any time of the day or night. We will continue this offering. Add reporting the total number of unique students served by UTC programs to this outcome. Reword this outcome next year to be more impact-oriented.

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

	Fall 2006	Spring 2007	Fall 2007	Spring 2008
Total # of requests (WA+SU+group*)	985	867	1075	958
# of WA requests	492	530	554	450
% (WA+group) requests/total requests	49.9%	61.1%	51.5%	47.0%
# of individual WA tutors	84	90	85	81
# of group tutors	n/a	n/a	n/a	14
# of individual WA assignments	321	339	366	284
# of group assignments	n/a	n/a	n/a	82
Total # of assignments			366	366
% of (WA+group) requests filled	65.2%	63.9%	66.1%	83.6%
# of Group contact hours	n/a	n/a	n/a	1488.25
# of Group hours tutored	n/a	n/a	n/a	571
# of WA hours tutored	3,758.25	4,690.25	3,981	4,164.75
Avg. # of WA hours	11.6	13.8	10.9	14.7
# of group hours tutored	n/a	n/a	n/a	878.75
Avg. # of group hours	n/a	n/a	n/a	10.7
SU hours Used	677.9	560.3	725.3	672.7
SU no-show hours	78	72	68	113
Total SU hours scheduled	755.9	632.3	793.3	785.9
Total SU hours offered	796.78	765	898.5	896
# of SU tutors	10	12	11	11
% of used SU appointments	85%	73%	80%	75%
% of scheduled SU appointments	87%	86%	88%	88%

\*Group tutoring was offered for the first time in spring 2008.

**Observation / Conclusion:** We began piloting small group tutoring mid-semester during fall 2007 with a few SI leaders, SU tutors, and permanent staff. Due to its success, group tutoring was introduced to all students in spring 2008 as a new program offering. Students, advisors, and faculty were informed at the beginning of the semester that priority weekly assignments would be made for small group tutoring for high-demand courses. We advertised that benefits of group tutoring for each student include working with an experienced tutor; meeting, learning, and collaborating with other students with the same instructor; and getting priority assigning. We were quite surprised when students actually began requesting group tutoring vs. individual tutoring! Another huge benefit of this new program was efficiency: a much higher % of requests were able to be filled than in any recent previous semester. 14 group tutors worked for a total of 571 hours, producing 1488.23 contact hours with their students.

In addition, to improve office efficiency and fairness to students, dates for when requests were accepted were modified such that new users and returning user requests were eligible at the same point. In the spring, all WA (both individual and group) were required to meet two hours/week. Those students who did not wish to work 2 hours/week were switched to use the SU program. SU hours were increased in the spring semester to meet this need for additional hours.

**Action / Decision:** The SU program can not be expanded any further given the lack of space. Group tutoring will be expanded, provided there are enough qualified tutors available. While students who were assigned a WA or group tutor were expected to use the service 2 times per week throughout the semester in spring 2008, the average number of hours used for these programs were not significantly higher than in previous semesters. Some students do not use the program throughout the semester for a variety of reasons (i.e.

student drops course, student doing fine without tutor, student assigned mid-semester) which skews the average. We plan to further investigate the distribution of students users in these programs to examine this information. Investigate ways to ease the tedious process of making group tutoring assignments, including changing the request application to instead request times that students are not available to be tutored. Reword this outcome next year to focus on efficiency and availability.

**Outcome 3:** Students will develop the skills necessary to succeed in the courses through individual tutoring by appointment experiences.

**Observation/Conclusions:** All students using individual weekly assigned and group tutoring programs completed a tutorial goal setting report with their tutor at the beginning of the tutoring relationship this year. The form was revised last year to better assist the tutor and student with identifying study skills areas that needed improvement and to set goals for the semester. Tutors were trained to use the form to start a discussion about long-term skills. Tutor-training curriculum was enhanced to educate tutors how and why to use the tutorial goal setting report effectively and to model study skills during tutoring sessions.

The UTC is constantly looking for ways to both demonstrate our effectiveness and to better serve our students. One question has been how does student motivation affect use of tutorial services. Please see appendix I for our attempts at measuring student motivation this year.

The group tutoring program was piloted in spring 2008. Benefits of the program included efficiency of resources and students meeting and learning from peers.

**Selected comments from Group Tutoring Surveys, completed by students assigned to Group Tutoring in Spring 2008:**

“[My tutor] has taught me and the other member of our group how to work with each other on assignments and use our resources for when she is not with us.”

“The interaction with the others helped to make the information clearer. If I missed something then most likely they got it.”

“Being in a group allowed me to sometimes go into depths in things I may or may not thought I needed further explanation on. Having another person being with me and the tutor often brought questions I would not have thought of which more than likely was very helpful to me.”

30 of 31 students that responded to the group tutoring survey indicated they were either satisfied or extremely satisfied with their tutoring experience this semester.

**Action/Decision:** Next year all individual weekly assigned students will take the LASSI (Learning and Study Strategies Inventory). This instrument will 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. Continue group tutoring program.

**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 2007 by Course							
	Enrollment	# Attending	Total Attendances	Sessions Offered	% Attending	Avg Att Per User	Avg Session Size
CH 101	2193	714	3024	287	32.6	4.24	10.54

CH 201	392	76	259	41	19.4	3.41	6.32
CH 221	550	238	992	119	43.3	4.17	8.34
CE 214	238	72	227	38	30.3	3.15	5.97
CE 215	122	43	411	41	35.2	9.56	10.02
MAE 206	81	54	171	42	66.7	3.17	4.07
MA 241	213	54	118	39	25.4	2.19	3.03
TOTAL	3789	1251	5202	607	33.0	4.16	8.57

SI Attendance for Spring 2008 by Course							
	Enrollment	# Attending	Total Attendances	Sessions Offered	% Attending	Avg Att Per User	Avg Session Size
CH 101	1042	451	2197	164	43.3	4.87	13.40
CH 201	684	271	1121	77	39.6	4.14	14.56
CH 221	550	223	1088	94	40.5	4.88	11.57
CE 214	232	49	303	41	21.1	6.18	7.39
TOTAL	2508	994	4709	376	39.6	4.74	12.52

**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 that were supported by SI in the 2007-2008 academic year met this goal and most far exceeded it! However, MAE 206 and MA 241 were not well attended comparatively, and had many sessions with zero attendance or only one or two students. For this reason, SI was not offered for these courses in the spring semester. Instead, specific tutors were chosen to be group tutors for the MA 241 and MAE 206 instructors whom SI had been offered for in the fall, and group tutoring was advertised to these sections in class at the beginning of the semester.

SI was not offered in CE 215 in the spring because an SI leader was not available and because feedback from the fall SI leader suggested that SI is not necessary in this course because of the academic maturity of the students enrolled.

**Action / Decision:** We will continue to offer SI in CH 101, 201, and 221 in 2008-2009. CE 214 presents a challenge – four small sections with different instructors are being offered in the fall semester and any one section may not be large enough to make SI cost effective. We may decide to offer group tutoring for this course as an alternative. SI will be offered in MAE 206 in the fall semester, as one instructor is teaching three large sections of the course (as compared to one in Fall 2007). We will continue to support MA 241 with group tutoring.

**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.

**Observation / Conclusion:**

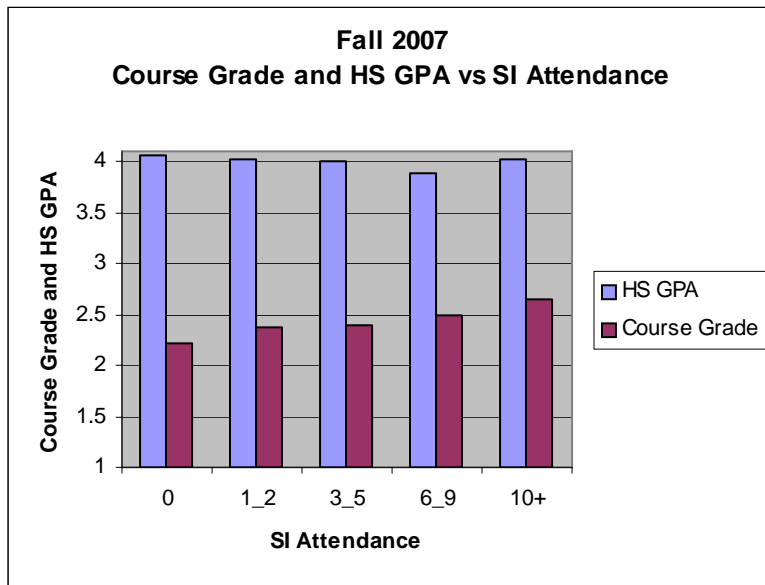
332 students responded to the online SI survey in Fall 2007. Responding to, “I am satisfied with the SI experience I had this semester.” The average response was 3.91 out of 5, with 5 being “strongly agree.” 91 students (27.3% of the respondents) were neutral, disagreed, or strongly disagreed with this statement.

Students were also asked,

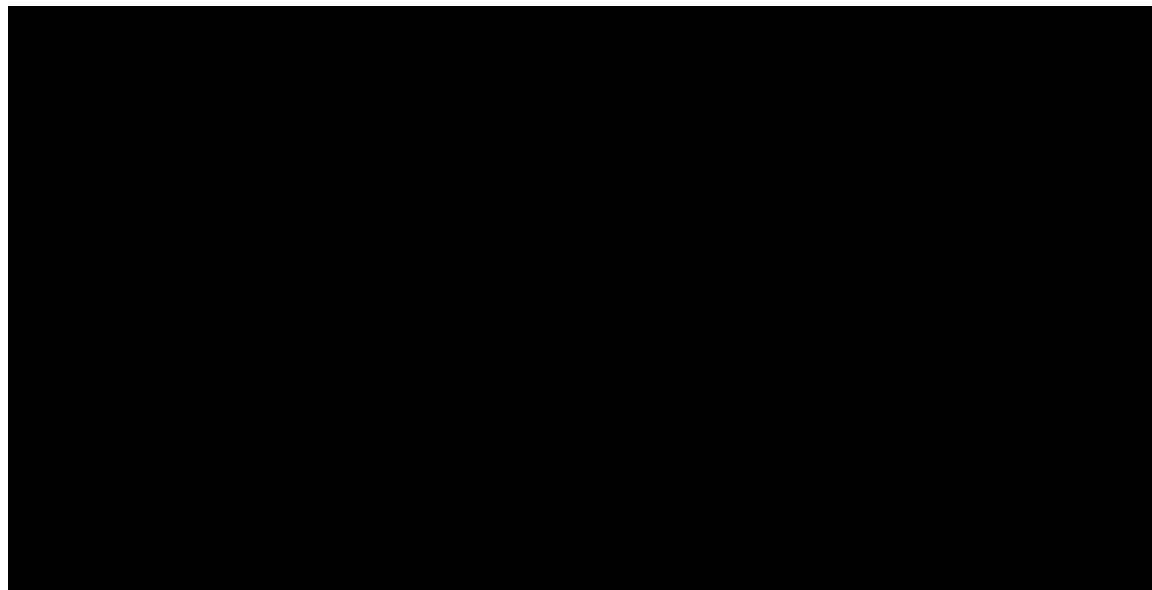
“In your opinion, what needs to be improved about your SI leader's performance?”

To this question, 53 of the 91 students mentioned above did not provide a response. 11 indicated that they did not think group work was effective or the SI leader should take on more of an instructor role. Eight recommended more structured sessions, four thought their SI leader should be more informed, eight said that

either the amount or kind of material discussed in sessions wasn't satisfactory, and two were concerned about their SI leader's attitude and/or energy level.



We notice that average course grade tends to increase as SI attendance increases. However, students with higher average course grades did not have higher average high school GPAs.



The small R Square value shows that much of the variability in students' scores cannot be explained by the variables chosen (SATM, 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 Math score, High School GPA, and the number of times he attended SI for the course. This model is below:

$$\text{Grade} = 0.034812 * (\# \text{ SI Visits}) + 1.011948 * (\text{HS GPA}) + 0.004227 * (\text{SAT Math}) - 4.63086$$

This model suggests that for each additional SI visit, course grade will increase .034812 grade points. Therefore, a student attending 10 times may expect a .34812 increase above what they would receive if they never attended SI.

(Note: the regression was performed using data only from the 3117 students enrolled in SI supported courses

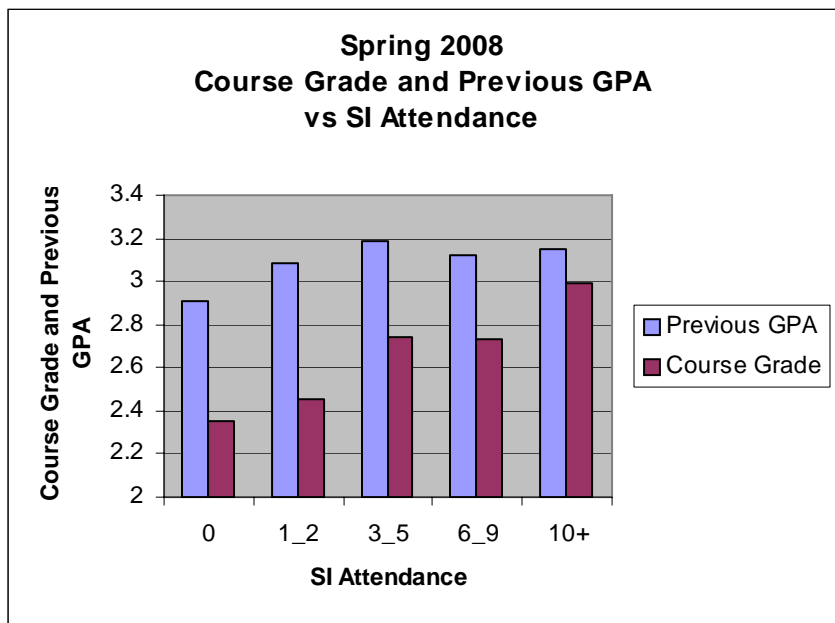
for whom each of HS GPA, SATM scores, and course letter grades were available.)

268 students responded to the online SI survey in Spring 2008. Responding to, "I am satisfied with the SI experience I had this semester." The average response was 4.154 out of 5, with 5 being "strongly agree." 61 students (23.5% of the respondents) were neutral, disagreed, or strongly disagreed with this statement.

Students were also asked,

"In your opinion, what needs to be improved about your SI leader's performance?"

To this question, 30 of the 61 students mentioned above did not provide a response. 16 indicated that they did not think group work was effective or the SI leader should take on more of an instructor role. Six recommended more structured sessions, three thought their SI leader should be more informed, and three were concerned about their SI leader's attitude and/or energy level. Other responses by individual students included: the SI leader should do more outside of class and sessions are too big.



We note that for students never attending SI, there was a significant gap in average course grade for the SI-supported course, and their previous GPAs. However, for students attending ten or more times, this gap was very small; students attending SI ten or more times, on average, did almost as well in the SI-supported ("historically difficult") course as they did in their previous courses.

SPRING 2008 MULTIPLE REGRESSION RESULTS

Regression Statistics	
Multiple R	0.63607096
R Square	0.40458626
Adjusted R Square	0.40347126
Standard Error	0.948991
Observations	2141

ANOVA					
	df	SS	MS	F	Significance F
Regression	4	1307.126811	326.782	362.855	1.39E-238
Residual	2136	1923.647258	0.90058		
Total	2140	3230.774068			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-2.2205289	0.202162998	-10.9839	2.4E-27	-2.6169858	-1.824072	-2.6169858	-1.824072
SATV	-0.0014592	0.000331427	-4.40273	1.1E-05	-0.0021091	-0.000809	-0.0021091	-0.000809
SATM	0.00429177	0.000332699	12.8999	1E-36	0.00363932	0.004944	0.0036393	0.004944
PREV GPA	0.94920332	0.029772867	31.8815	9E-183	0.89081649	1.00759	0.8908165	1.00759
SI VISITS	0.03168225	0.00471734	6.71613	2.4E-11	0.0224312	0.040933	0.0224312	0.040933

$$\text{Grade} = 0.03168*(\# \text{ SI Visits}) + 0.94920*(\text{Previous GPA}) + 0.004292*(\text{SAT Math}) - 0.001459*(\text{SAT Verbal}) - 2.22053$$

This model suggests that for each additional SI visit, course grade will increase .03168 grade points. Therefore, a student attending 10 times may expect a .3168 increase above what they would receive if they never attended SI.

(Note: the regression was performed using data only from the 2141 students enrolled in SI supported courses for whom each of Previous GPA, SAT scores, and course letter grades were available.)

**Action /Decision:** Beginning in Fall 2008, SI leaders will post their session plans and materials on a website so that other leaders will be able to use materials developed by their co-workers. More emphasis in training and staff meetings will be put on collaboration between leaders of the same subject, as they learn about common student misconceptions and learning trajectories for specific concepts. It is possible that certain activities and even session plans will become standard for SI sessions in certain courses.

**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 2006	Spring 2007	Fall 2007	Spring 2008
# of users	351	272	430	342
# of visits	662	553	810	685
Avg. visits/user	1.89	2.03	1.88	2.00
Efficiency (# hours used/# hours available)	61.29%	52.35%	76.51%	65.82%

WSTS: Total Visits at Ricks Hall (includes online tutoring)				
	Fall 2006	Spring 2007	Fall 2007	Spring 2008
# of users	232	198	254	271
# of visits	470	423	586	528
Avg. visits/user	2.03	2.13	2.23	1.95

Efficiency (# hours used/# hours available)	67.15%	58.70%	79.89%	72.43%
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WSTS: Total Visits at Avent Ferry Residence Hall				
	Fall 2006	Spring 2007	Fall 2007	Spring 2008
# of users	31	10	47	29
# of visits	33	13	66	45
Avg. visits/user	1.06	1.30	1.40	1.55
Efficiency (# hours used/# hours available)	44.56%	31.33%	67.76%	53.50%

WSTS: Total Visits at Lee Residence Hall				
	Fall 2006	Spring 2007	Fall 2007	Spring 2008
# of users	50	35	42	20
# of visits	56	43	47	26
Avg. visits/user	1.12	1.23	1.12	1.30
Efficiency (# hours used/# hours available)	46.61%	37.73%	55.14%	41.96%

Lee hall started late in fall 2007 semester

WSTS: Total Visits at FYC Commons (formerly in Tucker Hall)				
	Fall 2006	Spring 2007	Fall 2007	Spring 2008
# of users	79	46	87	62
# of visits	92	56	111	86
Avg. visits/user	1.16	1.22	1.28	1.39
Efficiency (# hours used/# hours available)	57.55%	40.90%	71.49%	49.84%

**Observation / Conclusion:** All locations saw an increase in visits both fall and spring semesters. The continued advertising via classroom visits, residence hall support, and advisor support (especially in FYC) is working well. We are almost at capacity in Ricks and FYC.

FYC was frustrating for some students since it was so busy, but students were not able to make appointments. We tried doing a sign-up sheet on the door, but that did not seem to help much.

Lee hall was slightly problematic in the spring since the tutor was working on a co-op rotation. While the student was free in the evenings, she seemed to have a hard time getting back on campus and cancelled sessions often. The number of students who visited Lee hall dropped off dramatically once that pattern was established.

**Action / Decision:**

- Investigate feasibility of hiring two tutors for FYC in fall 2008. Space would not be an issue.
- Resist hiring students who are co-oping.
- Continue to visit all ENG 100/101 courses.

**Outcome 7:** Provide high-quality tutoring in WSTS.

**End-of-session Surveys**

Questions relevant to Outcome 7	Results
<i>If the need arises in the future, will you use WSTS again?</i>	99.8% responded yes (n=511)
<i>How well did the session meet your needs?</i>	3.84 (on a scale of 0-4)

After sharing data from last semester that many students like reading the paper aloud, we have begun to share that with students who are resistant. Fewer students have reported disliking the process.

The major dislikes include needing more time and better help with citation styles, especially APA.

### End-of semester surveys

Scale: 1-5, 1= strongly disagree, 5=strongly agree		
Questions relevant to Outcome 6	Fall 2007	Spring 2008
<i>I am satisfied with the WSTS tutoring that I received this semester.</i>	4.6	4.2
<i>Overall, how well did WSTS meet your needs this semester?</i>	4.1	3.9

### Staff Observations

All tutors are progressing in their skills. The main area for improvement based on observations is assertiveness and citation styles.

### Fall 2007 Multiple Regression

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	0.41638	0.66636	0.22882	0.39	0.5331
WSTSVisits	0.09298	0.03832	3.44989	5.89	0.0166
HSGPA	0.25599	0.10601	3.41772	5.83	0.0171
ASATW	0.00284	0.00106	4.20540	7.18	0.0083

Model R-Square = 0.1420

The model created from this data is as follows:

Predicted ENG101 Grade = 0.09298 (# of WSTS Visits) + 0.25599(HSGPA) + 0.00284 (SAT Writing Score)

This suggests that we see meaningful improvement (+/- letter grade difference) in a student's ENG 101 grade when a student visits WSTS at least three times. The low r-square value suggests that these three predictors only account for 14% of the variability in the scores.

**Observation / Conclusion:** Students remain satisfied with our services. There are fewer comments about tutors not fixing the papers for the students. Students are becoming more concerned about access. Many comments call for more tutors and more hours. They do not see the need for more locations, though.

#### **Action / Decision:**

- Add extra training in MLA, APA, CSE styles
- Use senior tutors to help model assertiveness skills.
- Use data from Fall 2007 to help encourage students to come more than once.
- 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 2006	Spring 2007	Summer 2007	Fall 2007	Spring 2008
# of attenders	866	682	173	750	632
# of attendances	4139	3394	970	3730	3607
# hours staffed/week	153	130	80	130.5	135
Total # hours staffed	1843	1703.25	618.5	1714.75	1787.75
Efficiency (# hours used/# hours staffed)	383%	325%	252%	345%	303%

**Observation / Conclusion:** The PMTC was open for the second summer in 2007 to address the lack of physics and calculus support available during summer sessions. Since many visiting summer students are not issued student ids, many did not know their student number and therefore did not register their attendance on the login computer. In addition, some students do not log in/out when the center is busy in the regular semesters. Therefore, the attendance information is likely too low. The difference between fall 2006 and 2007 usage occurred because the PMTC did not tutor M&I classes in fall 2007 (it was offered in fall 2006). This decision was made due to the concern about the limitations of assisting M&I students in the drop-in tutoring format. M&I students were redirected to help sessions facilitated by the physics department.

**Action / Decision:** The log-in process and staffing during the summer will be adjusted in 2008 to increase accuracy and efficiency. Staffing and hours will be adjusted to strive for ~300% efficiency (this rate has been seen to be cost efficient while also maintaining a high student satisfaction rate).

**Outcome 9:** Provide high-quality tutoring in the PMTC.

**Observations:** Currently the PY department contributes graduate students as tutors on a yearly cycle. Each potential graduate student must complete and interview with Barbie before being cleared for hire in the PMTC.

From the end-of semester student surveys: 81% of fall 2007 respondents and 84% of spring 2008 respondents indicated that they agreed or strongly agreed that they were satisfied with their experiences in the PMTC. Those that indicated dissatisfaction were typically unhappy because the center was too busy or did not offer tutoring for M&I courses.

Student guidelines and expectation posters were created for the fall 2007 semester so that students entering the PMTC would be aware of the center's philosophy that tutors will encourage them to take responsibility for their learning by developing problem-solving, decision-making, resource-finding, and metacognitive skills to help them become independent learners. The guidelines were also posted to the PMTC website for the spring 2008 semester. As a result, tutors reported less resistance for students using the center "just to get answers". A basic model for problem solving was also added to the website for student use.

### PMTC Focus Group

A recurring concern we have about the PMTC is that each semester a large number of students attend only once. On Wednesday, February 6, 2008, Marcia (assisted by Megan) conducted a focus group of students who attended the PMTC one time in Fall 2007, but did not return. While we invited all students in this category (N=268), only 5 responded and 4 students attended. The incentive was dinner (pizza) and the chance to win a \$50 gift certificate to the NC State Bookstore. There were multiple evening offerings from which the students

could pick to attend.

The data collected from this group

- Recruitment of students:
  - Students hear about the PMTC via other students, professors, and NSO.
  - Many got the hours off the PMTC website.
  - The general comments one hears about the PMTC before going are positive.
- Space:
  - Students found the space too far away from their housing.
  - They agreed that sometimes it was confusing where one should go when she arrives
  - Some students also found the space crowded and loud at times.
- Tutoring:
  - Students felt that it took too long to get help when it was busy.
  - Idle time: multiple students complained of having “idle time” while waiting for a tutor, they were not able to get any other work done.
  - The help wasn’t consistent always: three tutors may help with one student’s question.
  - Since a tutor may not spend a long time understanding the problem, there were also incidents of incorrect answers.
- What did students do other than attend the PMTC:
  - The students in the focus group all indicated that they had identified and used other resources for academic assistance (and had therefore been successful in their physics/math course in the fall). Students mostly talked to friends who are proficient in the subjects and/or visited with their professors.

An interesting suggestion taken from the focus group discussion was to identify a way for students to be able to know how busy it is before trekking across campus to the Fox Building.

**Action / Decision:** Continue to screen graduate student candidates. Continue conversations with the physics department about ways to support their students as their instructors and curriculum continue to change. Reword this outcome next year to make it more impact-oriented.

From focus group:

- We contacted TutorTrac (our online attendance-tracking software company) to see if they could provide a website widget that would show how many students are logged in. They indicated that they do not currently have one.
- We surveyed tutors, students, and NC State IT support about installing a webcam to provide a real-time picture of the center on our website. While all tutors and a few students saw a benefit in being able to see the crowd, many students perceived it as an invasion of privacy. Therefore, we have decided not to install a PMTC webcam.
- We are currently prodding TutorTrac for a way to have a login count that we could display on the PMTC’s website.
- If another focus group is attempted, we will change the incentive to be a \$10-\$15 board bucks donation for everyone who attends.

**Outcome 10:** UTC’s tutorial services will have a diverse clientele.

**Tutoring by Appointment (WA, SU):**

Fall 2007			
Ethnicity	Overall Undergraduate Enrollment (% of total registered enrollment)*	Number Served (% of total)	Avg. Hours Tutored WA/SU
White	19,058 (78.9%)	351 (61.9%)	8.34
African Am.	2,174 (9.0%)	151 (8.6%)	8.61
Asian Am.	1,258 (5.2%)	34 (6.0%)	9.16
Hispanic	634 (2.6%)	15 (2.7%)	9.35
Am. Indian	145 (0.6%)	2 (0.4%)	9.5
Not Reported	560 (2.3%)	14 (2.5%)	8.35
Gender			
Female	10,534 (43.6%)	358 (63.1%)	8.3
Male	13,611 (56.4%)	209 (36.9%)	8.83
Spring 2008			
Ethnicity	Overall Undergraduate Enrollment (% of total registered enrollment)*	Number Served	Avg. Hours Tutored WA/SU
White	17,944 (79.1%)	314 (66.8%)	11.46
African Am.	1,993 (8.8%)	105 (22.3%)	12.97
Asian Am.	1,158 (5.1%)	30 (6.4%)	15.71
Hispanic	576 (2.5%)	8 (1.7%)	13.92
Am. Indian	132 (0.6%)	3 (0.6%)	17.17
Not Reported	582 (2.6%)	10 (2.1%)	11.14
Gender			
Female	9,968 (43.9%)	302 (64.3%)	12.01
Male	12,724 (56.1%)	168 (35.7%)	12.37

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

### Supplemental Instruction:

Fall 2007			
Ethnicity	Percentage of Students Enrolled in SI-supported Sections	Percentage of SI participants	Average Number of Sessions
White	79.8	77.2	4.20
African Am.	7.6	10.1	4.67
Asian Am.	6.5	5.7	4.67
Hispanic	2.6	3.8	3.05
Am. Indian	0.58	0.36	3.00
Unreported	3.0	2.9	4.50
Gender			
Female	36.2	41.8	4.08
Male	63.8	58.2	4.35
Spring 2008			

<b>Ethnicity</b>	<b>Percentage of All Students Enrolled in SI-supported Sections</b>	<b>Percentage of all SI participants</b>	<b>Average Number of Sessions</b>
White	77.4	74.9	4.76
African Am.	8.4	11.9	5.37
Asian Am.	7.6	7.1	4.82
Hispanic	2.7	2.7	4.71
Am. Indian	0.63	0.43	7.75
Unreported	3.27	2.97	4.93
<b>Gender</b>			
Female	49.3	60.4	4.70
Male	50.7	39.6	5.08

**PMTC:**

<b>Fall 2007</b>			
<b>Ethnicity</b>	<b>Overall Undergraduate Enrollment (% of total enrollment)*</b>	<b>Number Served (% of total) n=750</b>	<b>Avg.# of Visits</b>
White	19,058 (78.9%)	533 (71.1%)	5.32
African Am.	2,174 (9.0%)	104 (13.9%)	5.49
Asian Am.	1,258 (5.2%)	70 (9.3%)	4.40
Hispanic	634 (2.6%)	20 (2.7%)	5.20
Am. Indian	145 (0.6%)	4 (0.5%)	3.25
Not Reported	560 (2.3%)	19 (2.5%)	4.00
<b>Gender</b>			
Female	10,534 (43.6%)	331 (44.1%)	5.28
Male	13,611 (56.4%)	419 (55.9%)	5.16
<b>Spring 2008</b>			
<b>Ethnicity</b>	<b>Overall Undergraduate Enrollment (% of total enrollment)*</b>	<b>Number Served n=632</b>	<b>Avg. # of Visits</b>
White	17,944 (79.1%)	435 (68.8%)	5.68
African Am.	1,993 (8.8%)	96 (15.2%)	5.72
Asian Am.	1,158 (5.1%)	64 (10.1%)	5.48
Hispanic	576 (2.5%)	15 (2.4%)	6.73
Am. Indian	132 (0.6%)	3 (0.5%)	9.33
Not Reported	582 (2.6%)	19 (3.0%)	5.63
<b>Gender</b>			
Female	9,968 (43.9%)	288 (45.6%)	5.38
Male	12,724 (56.1%)	344 (54.4%)	5.98

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

**Writing and Speaking Tutorial Services:**

Fall 2007			
Ethnicity	Overall Enrollment (% of total enrollment)*	Number Served (% of total)	Avg. Hours Tutored
White	23,766 (74.7%)	360 (45.6%)	0.66
African Am.	2,739 (8.6%)	202 (25.6%)	0.69
Am. Indian	175 (0.6%)	5 (0.6%)	0.65
Asian Am.	1,507 (4.7%)	66 (8.4%)	0.57
Hispanic	774 (2.4%)	52 (6.6%)	0.65
Not reported	642 (2.0%)	15 (1.9%)	0.72
International	2,199 (6.9%)	90 (11.4%)	0.70
Gender			
Female	14,070 (44.2%)	486 (61.5%)	0.68
Male	17,732 (55.8%)	304 (38.5%)	0.65
Spring 2008			
Ethnicity	Overall Enrollment (% of total enrollment)*	Number Served	Avg. Hours Tutored
White	22,548 (75.0%)	285 (42.7%)	0.69
African Am.	2,522 (8.5%)	202 (30.3%)	0.69
Am. Indian	158 (0.5%)	2 (0.3%)	0.63
Asian Am.	1,388 (4.6%)	63 (9.4%)	0.58
Hispanic	726 (2.4%)	12 (1.8%)	0.76
Not Reported	691 (2.3%)	17 (2.5%)	0.48
International	1,982 (6.6%)	86 (12.9%)	0.78
Gender			
Female	13,364 (44.5%)	385 (57.72%)	0.70
Male	16,681 (55.5%)	282 (42.28%)	0.67

\* WSTS serves both undergraduate and graduate students. Faculty members who used our services have been omitted for this report.

**Observation/Conclusion:** All programs met or exceeded the goal that they would have a diverse clientele as measured by gender and ethnicity. It is very interesting to note that the average hours of tutoring by appointment used spring 2008 were significantly more than in fall 2007. This difference reflects that change in our policy that students who requested weekly assigned must meet 2 hours/week every week during the semester.

In addition, the average GPA of users this year was a 2.9. This statistic indicates that UTC programs are not remedial services and are used by a diverse group of students as measured by academic achievement.

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

## Objective II: Tutor Training

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 tutors.

Fall 2007		
Ethnicity	All undergraduates with GPA $\geq$ 3.0* (%)	Tutors and SI Leaders employed by the UTC (%) n=135
White	7104 (83.25)%	96 (71.11%)
African Am.	463 (5.43%)	7 (5.19%)
Asian Am.	540 (6.33%)	27 (20.0%)
Hispanic	508 (2.44%)	2 (1.48%)
Am. Indian	35 (0.41%)	0 (0.00%)
Not Reported	183 (2.14%)	3 (2.22%)
Gender		
Female	4191 (49.12%)	65 (48.15%)
Male	4342 (50.88%)	70 (51.85%)

Spring 2008		
Ethnicity	All undergraduates with GPA $\geq$ 3.0* (%)	Tutors and SI Leaders employed by the UTC (%) n=127
White	9,763 (82.24%)	100 (78.74%)
African Am.	711 (5.99%)	6 (4.72%)
Asian Am.	738 (6.22%)	17 (13.39%)
Hispanic	304 (2.56%)	2 (1.58%)
Am. Indian	47 (0.40%)	0 (0.00%)
Not Reported	309 (2.60%)	2 (1.58%)
Gender		
Female	6060 (51.04%)	63 (49.61%)
Male	5812 (48.96%)	64 (50.39%)

**Observations/Conclusions:** \*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. The above tables indicate that the UTC is employing a diverse staff given the constraints of the eligible pool. This year we advertised the tutoring opportunity via emails to students and advisors in CALS, ENG, PAMS, Scholars, Honors, Multicultural Listserv, Facebook (fall 2007). We also gave a presentation to Teaching Fellows first year students (spring 2008) and staffed a booth at the fair for Honors students.

In addition, the UTC actively embraced 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 worked with Amy Circosta in the OEO office to develop a training specific for undergraduate tutors, including case studies. This year the training was optional for current ECI 210 students and a requirement of rehire for

future semesters for all first semester returning tutors (spring 2008). Tutors could choose to attend a one-hour workshop facilitated by Amy or complete the online training module (<http://www.ncsu.edu/project/oeo-training/harassment/>) and complete a one page paper describing how the information presented in the training applies to your job as a tutor.

**Action/Decision:** Continue recruiting efforts for a diverse pool of qualified tutors. Beginning in summer 2008 all ECI 210 students will be required to complete the online training module as an assignment for class. This assignment will tie into the communications and culture lesson to better inform tutors of their responsibilities towards protected classes.

**Outcome 2:** The UTC will offer continued employment opportunities to tutors and SI leaders with demonstrated competence.

**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.

Semester	Number of students enrolled in ECI 210	Returned in a subsequent semester	Not rehirable
Spring 2007	49	34 (69.4%)	7
Summer 2007	9	6 (66.7%)	2
Fall 2007	47	25 (53.2%)	13

Once new student tutors successfully complete ECI 210, they have the opportunity to apply for SI leader and tutoring positions in SU, PMTC, WSTS, and group programs. Seasoned tutors and SI leaders have the opportunity to apply for supervisory responsibilities. This year the Tutor Mentor peer supervision was begun. Experienced senior tutors were hired to conduct tutor observations and facilitate workshops. The mentors became skilled in assessing others' performance as well as their own. They worked 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 were awarded to returning tutors in spring 2008 as a "thank you" for their hard work.

**Action/Decision:** Add objective for next year about UTC's role in developing tutor leadership skills and revise the order of tutor objectives. Bring back the tutor of the semester award incentive once the new tutor coordinator is in place.

**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 2007	Spring 2008
<i>1. I have a good understanding of the subjects that I tutor.</i>		
<i>ECI 210 tutors</i>	4.4	4.7
<i>Weekly Assigned returning tutors</i>	4.7	4.6
<i>Sign-up tutors</i>	4.2	4.7

<i>PMTC tutors</i>	4.4	4.4
<i>SI Leaders</i>	4.7	4.8
<i>WSTS tutors</i>	4.6	4.8
<i>2. My own knowledge of the subject improved as a result of tutoring.</i>		
<i>ECI 210 tutors</i>	4.6	4.4
<i>Weekly Assigned returning tutors</i>	4.7	4.7
<i>Sign-up tutors</i>	4.8	5.0
<i>PMTC tutors</i>	4.4	4.5
<i>SI Leaders</i>	4.2	4.0
<i>WSTS tutors</i>	4.9	4.9

**Observation / Conclusion:** Undergraduate student tutors who have worked for several semesters and graduate student tutors tend to be more neutral that their own knowledge of the subject improved as a result of tutoring during the current semester.

**Action / Decision:** Add a self-evaluation form for group tutors next year.

**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 2007	Spring 2008
<i>I have improved my ability to communicate as a result of tutoring.</i>		
<i>ECI 210 tutors</i>	4.5	4.2
<i>Weekly Assigned returning tutors</i>	4.7	4.7
<i>Sign-up tutors</i>	4.5	4.7
<i>PMTC tutors</i>	4.5	4.4
<i>SI Leaders</i>	4.7	4.5
<i>WSTS tutors</i>	5.0	5.0
<i>In general, my abilities as a tutor have improved this semester.</i>		
<i>ECI 210 tutors</i>	4.6	4.7
<i>Weekly Assigned returning tutors</i>	4.6	4.6
<i>Sign-up tutors</i>	4.5	4.8
<i>PMTC tutors</i>	4.5	4.5
<i>SI Leaders</i>		4.5
<i>WSTS tutors</i>	4.9	5.0

**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. Investigate self-reported improvement in assertiveness skills next year. Use the positive outcome as an advertising tool for recruiting new tutors.

**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 2007	Spring 2008
<i>I have improved my ability to facilitate groups as a result of leading SI sessions.</i>	4.5	4.3

**Observation / Conclusion:** Group facilitation is a skills 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. Add this question to the group tutoring self-evaluation next year.

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

Scale: 1-5, 1 = strongly disagree, 5 = strongly agree		
	Fall 2007	Spring 2008
<i>I promote good study skills with my students by discussing effective behavior.</i>		
<i>ECI 210 tutors</i>	4.2	4.1
<i>Weekly Assigned returning tutors</i>	4.0	3.9
<i>Sign-up tutors</i>	N/A	N/A
<i>PMTC tutors</i>	N/A	4.1
<i>WSTS tutors</i>	N/A	N/A
<i>I use activities in my sessions/interactions that help students develop better study skills.</i>		
<i>ECI 210 tutors</i>	3.5	3.8
<i>Weekly Assigned returning tutors</i>	3.8	3.6
<i>Sign-up tutors</i>	N/A	N/A
<i>PMTC tutors</i>	N/A	3.7
<i>WSTS tutors</i>	N/A	N/A

**Observation / Conclusion:** This outcome was added to the PMTC tutor self-evaluation in spring 2008. 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.

Daniel Grissom began tutoring for the UTC in spring 2007 and served as a TM this year. This semester he wrote in his self-evaluation, “This year I realized that effective study skills doesn’t just mean how much time students spend studying, or how organized their notes are, or whether or not they make flash cards, but it includes how they approach specific types of exercises and problems. I really tried to put myself in the minds of my tutees and figure out how they were processing the information, and then come up with specifics to help them. I think it paid off as I’ve seen some significant improvement in my tutees’ work, including more open-ended activities that involve free-form writing and reading comprehension.”

**Action / Decision:** Measure this outcome with SU and group tutors next year. 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.

**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 2007 Response average	Spring 2008 Response average
Learn about the Undergraduate Tutorial Center's policies and procedures.	4.4	4.46
Understand the tutor-student relationship and my role as a tutor.	4.5	4.79
Differentiate between direct and indirect tutoring techniques.	4.15	4.46
Use positive reinforcement in my tutoring sessions.	4.125	4.58
Use questioning in my tutoring sessions.	4.45	4.71
Encourage tutee verbalization through listening in my tutoring sessions.	4.275	4.39
Encourage my tutees to become independent learners.	4.075	4.08
Analyze my strengths and areas of improvement as a tutor.	4.35	4.58
Encourage my tutees to set goals.	3.9	3.96
Understand my learning preferences and how they impact my work with students.	4.1	4.0
Employ assertive approaches to dealing with problems within the tutoring relationship.	3.925	3.46
Increase awareness for working with student differences.	3.975	4.21
Apply strategies that accommodate student differences.	4.075	4.17
Promote study skills with my tutees by modeling and discussing effective behavior.	4.075	4.21

**Observation / Conclusion:** Email #1 assignment was changed in spring 2008 to help new tutors in learning the UTC policies and procedures. Material on assertiveness and the benefits of student verbalization was revised last summer based on current research practices. Tutors took the MSLQ in fall 2007 and the IAT (Implicit Association Test) in spring 2008. Instructors for each section co-led the communications and culture class with Marcia in spring 2008.

**Action / Decision:** Train tutors how to effectively use 2 hours/week of tutoring (i.e. what to do when the current webassign is done). Incorporate how the tutor should use the LASSI results when working with tutees. Continue weekly instructor meetings and course evaluations. Revise coursepack and assignments to better assist with meeting both course objectives and student satisfaction. Since neither tutors nor instructors saw

benefit from the MSLQ or IAT assignments, they will no longer assigned. Students will instead be required to participate in a Discrimination and Harassment Prevention workshop as part of the training course.

Many ECI 210 students are find being assertive to be challenging. Add an outcome about assertiveness next year.

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

Certification Level:	2006-2007 academic year	2007-2008 academic year
Level I (10 training hours, 25 tutoring hours)	32 (16.7%)	45 (25%)
Level II (20 training hours, 50 tutoring hours)	75 (39.0%)	57 (31.7%)
Level III (30 training hours, 75 tutoring hours)	57 (29.7%)	58 (32.2%)
Tutor quit during the semester	8 (4.2%)	4 (2.2%)
Tutor was not rehirable at the end of the semester based on supervisor recommendation	20 (10.4%)	16 (8.9%)
<b>Total:</b>	<b>192 (100 %)</b>	<b>180 (100%)</b>

**Observation / Conclusion:** Last summer we changed the number of training hours of ECI 210 from 20 to 18, to align our payscale with CRLA certification levels and to more accurately represent training received during the first semester.

This year the Tutor Mentor (TM) peer supervision program was piloted. In the fall, the program had three 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. During the semester, the tutor mentors also assisted in planning and leading tutor training meetings. These opportunities will be expanded and refined in 2008-2009.

With the success and generally positive feedback received regarding the TM program in the fall, it was expanded to five mentors in the spring in order to cover the entire group of individual tutors.

New mentor-inspired components such as semester-long goal sheets were implemented. In addition, TM Chris Venters became the TM supervisor after the departure of our tutor coordinator in January. Overall, the TM program has been successful in providing an additional structure for training, supervision, and leadership development.

When asked how the TM supervisor opportunity shaped his leadership skills, he said, “ Possibly the single greatest thing that I have gotten in terms of leadership from the UTC is learning that leadership involves great teamwork. I have seen first-hand that good leaders are good team players and that they value the inputs and accomplishments of the people that they are working with. Having people look to you for guidance and direction quickly makes you a leader. Working together to solve problems and constantly looking for ways to improve are what I think makes us great leaders.”

**Action/Decisions:** Continue TM program next year. Change credited training hours for ECI 210 to 19 hours with the addition of the OEO training requirement. 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.

## Objective III: On-Campus Initiatives

To develop partnerships and share expertise with on-campus constituents

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**Outcome 1:** The UTC staff will develop partnerships with members of the campus community.

**Observation/ Conclusion:** Partnerships in 2007-2008 included:

**Office of Assessment and FYC** to collect SOAR data. The UTC also recommended to tutors to FYC and TP for their PackStudy halls.

**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 partners with physics and math departments to offer the PMTC. The UTC hires, trains, and supervises all tutoring personnel while the physics department provides space, equipment, and money for the salaries of the tutors. The math department also provides some funding for tutor salaries. This is 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. The UTC also partnered with the math department in spring 2008 to offer Video-Based Supplemental Instruction for a MA 141 section and to assist with training MA TAs in fall 2007.

**Mechanical Engineering Department** SI was offered for the first time in Mechanical Engineering statics in fall 2007. Support for this course continued in the spring with group tutoring. Our partnering instructor is redesigning the course in 2008-2009 and plans to hire undergraduate Lecture Assistants, who will be trained in ECI 210. They will also possibly continue to work as group tutors for the course. The instructor has also asked for us to help create materials for students whose study skills are deficient.

**Wolfpack Welcome Week** This was the first 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.

**University of North Carolina at Chapel Hill (UNC-CH)** Through grants provided by the UNC General Administration and NC State's distance education department, WSTS is able to provide online writing tutoring to all enrolled students. The partnership with UNC-CH developed the online tutoring application <<https://ncstate.writing-center.org/ota/app>> while the local grant provided resources for supporting materials such as online presentations <[http://www.ncsu.edu/tutorial\\_center/writespeak/off\\_presentations.htm](http://www.ncsu.edu/tutorial_center/writespeak/off_presentations.htm)>.

**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 2007					
	Consultations	Classroom Presentations	Student Group Presentations	Faculty Presentations	Fall Total
# of Events	8	35	21	1	65
# of Attendees	19	4067	642	40	4768
SPRING 2008					
	Consultations	Classroom Presentations	Student Group Presentations	Faculty Presentations	Spring Total
# of Events	6	20	7	2	35
# of Attendees	8	3070	231	31	3340

**Observations / Conclusions:** New presentations this year included an academic support workshop on successful study strategies for college at the Wolfpack Welcome Week and several workshops on effective questioning and study skills strategies for the Certificate for Accomplishment in Teaching (CoAT) graduate training program which was part of the Faculty Center for Teaching and Learning this year.

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

Writing and Speaking Tutorial Services 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.

**Actions / Decisions:** The CoAT program will move to the Graduate School next year. 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.

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

Tutor training product	# of items sold (between 5/1/07-4/30/08)
A Look at Productive Group Learning Sessions (DVD)	21
A Look at Productive Group Learning Sessions (VHS)	3
A Look at Productive Tutoring Techniques (DVD)	102
A Look at Productive Tutoring Techniques (VHS)	4
Users' Guide	74

**Observations/Conclusions:** The UTC's tutor training products continue to sell well and be highly respected in the tutoring field. The 3<sup>rd</sup> edition of the Users' Guide was written last summer. This revision was made to help customers maximize the effectiveness of using the video series *A Look at*

*Productive Tutoring Techniques* during tutor training. New activities and suggestions were added that are used in our current tutor training classes and revisions were made for clarity and eye appeal.

Our tutor training DVD “A Look at Productive Tutoring Techniques” was converted to region 0 format this year so that it is playable in all DVDs across the world. This conversion was initiated so that it could be used to train tutors starting a writing center at a technical university in Windhoek, Namibia.

This year our products sold to 113 institutions in 35 different US states, as well as two institutions in British Columbia, Canada, and one institution in Namibia, Africa.

Marcia was promoted to Associate Director of the UTC this year. Her new job responsibilities include overseeing further development of products for use by UTC tutors and for dissemination to the tutoring field.

**Actions/Decisions:** The contract between Allied Vaughn and Reg.Net (our outside vendors) will be renewed for 2008-2009. Under Marcia’s leadership, the staff will 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 2007			
	Consultations	Professional Presentations/Participation	Fall Total
# of Events	4	4	8
# of Attendees	13	37	50
SPRING 2008			
	Consultations	Professional Presentations/Participation	Spring Total
# of Events	1	2	3
# of Attendees	1	50	51

**Observations/Conclusions:** A complete listing of professional development highlights is listed in the 2007-2008 UTC annual report. One highlight this year was an invitation for Barbie to participate in an external peer review of the Math and Science Resource Center and Temple University. This invitation was extended thanks to the national reputation of NC State’s tutor training program.

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

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### Appendix I: Special Initiatives

## I. Measuring Motivation:

Attempt I: MSLQ - Motivated Strategies for Learning Questionnaire (Pintrich, 1991)

In the fall of 2007, we invited all students using the WA program (N = approximately 350) to complete the MSLQ. We received 25 responses. We did not see any correlation between number of hours used and final course grade, controlling for MSLQ scores. There was also a wide range of responses from the students.

We also had our tutors in ECI 210 complete the MSLQ for comparison data. Students and Tutors showed no difference on learning strategies. However, the motivational data was more interesting.

MSLQ Differences Significant at the 0.05 level

		M	Variance	N	Difference in Means	T statistic	P-Value
Intrinsic Goal Orientation	Students	4.11	1.60	25	1.24	4.54	0.0001
	Tutors	5.35	0.47	44			
Task Value	Students	4.55	2.28	25	1.22	3.79	0.0006
	Tutors	5.77	0.50	44			
Self-Efficacy for learning and performance	Students	5.03	1.21	25	0.67	2.54	0.014
	Tutors	5.70	0.97	44			

While there were not significant differences between the students and tutors in terms of extrinsic motivation and text anxiety, tutors did demonstrate higher intrinsic motivation, valuing of the learning task, and self-efficacy.

## Attempt II: SOAR

After disappointing return rates on the MSLQ, we investigated ways of joining our data with the First Year College/Transition Program/ASPSA data on incoming freshman. This data offered the benefit of including almost every freshman in the population of those three programs, and it gave us a pool of users and nonusers to compare.

Contrary to many skeptics opinions about the users of tutoring services, there were not statistically significant differences between users and nonusers of our services in any of the SOAR scales, these included scales which looked at the student's motivation, self-efficacy, hope, and perceived stress. While there was also not a statistically significant difference in the semester GPA for users and non-users, users completed on average 0.8 more credit hours than non-users.

SOAR Differences Significant at the 0.05 level

		M	SD	N	Difference in Means	T statistic	P-Value
Fall Hours Passed	Users	14.021	2.33	191	0.759	3.80	0.0002
	NonUsers	12.262	2.78	668			

## Action / Decision

- We will continue to partner with the office of assessment to better understand our students.
- Piloting in Summer 2008 and Fall 2008, we will use the LASSI (Learning and Study Strategies Inventory) with all students with individual weekly assigned tutors.

**II. SMRT** Thanks to the amazing talents of Marcia, this year the UTC designed and implemented an in-house computer application. This program (SMRT) has alleviated the tremendously cumbersome and time-consuming task of manually matching tutor and tutee information to make hundreds of one-on-one tutoring assignments. In addition, many of our former paper processes have been automated through this program. All information can be archived and retrieved from previous semesters. The program also generates various reports, an essential component for assessment purposes.

**III. Video-based Supplemental Instruction:**

In Spring 2008, Megan piloted a VSI section of MA 141. The class met MWF 1:30-2:20, TH 1:30-2:45, which is 50 minutes per week beyond that of traditional sections. Students watched short segments of taped lectures by the same professor who taught another traditional section and then participated in SI-type activities. Data for both sections is compared below.

<b>Grade Distribution for MA 141, Spring 2008</b>						
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>F</b>	<b>U/W/IN</b>
<b>Traditional (n=57)</b>	3 (5.3%)	6 (10.5%)	25 (43.9%)	8 (14.0%)	6 (10.5%)	9 (15.8%)
<b>VSI (n=20)</b>	1 (5.0%)	2 (10.0%)	8 (40.0%)	5 (25.0%)	2 (10.0%)	2 (10.0%)
<b>VSI w/out Attendance</b>	1 (5.0%)	3 (15.0%)	9 (45.0%)	3 (15.0%)	2 (10.0%)	2 (10.0%)

	<b>A/B/C</b>	<b>D/F/U/W/IN</b>	<b>Previous GPA</b>	<b>Semester GPA</b>	<b>Average Course Grade</b>
<b>Traditional</b>	59.7%	40.3%	2.2036	2.1959	1.8403
<b>VSI</b>	55.0%	45.0%	2.1797	2.2303	1.6852
<b>VSI w/out Attendance</b>	65.0%	35.0%	2.1797	Not available	1.8519

In the VSI section, 5% of students' grade came from attendance. 5 students lost enough points to affect their letter grade, so results are shown both for their actual reported grade, and the grade they would have received had they received all 5 points for attendance, since this was not a factor in grades for students in the traditional section.

15 students in the VSI section completed a survey at the end of the semester. Answers to selected questions are provided below:

Of the 8 students who had taken MA 141 previously at NC State, 6 would recommend VSI to other students. The other 2 were neutral. Of the 7 who had not taken MA 141 previously, one would recommend VSI, 3 were neutral, and 3 would not recommend it.

Most negative ratings were supported by comments either about the attendance policy or about not having regular contact with the official course instructor. If a VSI section is conducted in the future, the instructor should attend class at least once every two weeks to clarify expectations and address student questions and concerns.

**IV. Data Collection** Data from all UTC programs is now combined at the end of each semester. Staff can now quickly and efficiently retrieve information of all programs, including demographics, from one spreadsheet. This new collection process has greatly improved the efficiency of response time to periodic requests from the Dean's office.

**V. Producing leaders for the state, nation and the world (illustrates UTC's impact on a key university focus area):**

The UTC's philosophy is to actively engage students by guiding them to become independent learners. The UTC works strenuously to develop critical skills necessary for students' personal and professional development. All programs are designed to provide opportunities for students to become responsible for their own learning in order to enhance their academic experiences. These programs are essential because they put students into environments where they can succeed, but the students are still held accountable for their own behavior and learning.

In addition, successful undergraduate peers are hired and trained to be tutors. Tutors are trained to use indirect techniques designed to help tutees improve study skills and become academically successful. Tutors receive continual supervision and earn additional leadership opportunities in order to effectively serve their fellow student while growing as effective communicators and leaders. For example, in addition to the one-on-one leadership tutors always display, this year the Tutor Mentor peer supervision was begun. Experienced senior tutors were hired to conduct tutor observations and facilitate workshops. The mentors became skilled in assessing others' performance as well as their own. They worked closely with professional staff to develop and implement ideas while honing professional skills like leadership, time management, and assertiveness. Overall, both the training opportunities and tutoring experiences offered through the UTC result in more profound intellectual and personal growth for thousands of student tutors and tutees each semester. The UTC is not just about learning equations and grammar, but about learning how to learn, valuing differences, and practicing making good choices. This learning process prepares both students who use our services and our peer tutors for success as leaders for the state, nation, and world.

For instance:

- Numerous tutors have become teachers in the middle school through community college level. Because of our population of tutors, the majority are in STEM fields. Many of these chose to become teachers after working for the UTC.
- Many tutors have worked for Teach for America.
- Many tutors have gone on to become leaders in the tutoring field. One is starting a SI program at Johns Hopkins where she is a graduate student in Chemical Engineering. One is leading a writing center at a community college.
- One tutor garnered the Goldwater award this spring.
- Multiple tutors have decided to enter PhD programs in their respective fields with the intent of becoming university faculty. One has specifically chosen to enter the new field of Engineering Education.