

University: North Carolina State University

Program: Undergraduate Tutorial Center

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Description of Program:

The Undergraduate Tutorial Center (UTC) sponsors a variety of academic support services to serve the needs of students primarily in freshman and sophomore level courses. Services may be categorized as drop-in tutoring, one-on-one tutoring, and group assistance.

Drop-in services include the Walk-in Tutoring Service (WITS), the Supplemental Instruction Chemistry Walk-in Center, and Writing and Speaking Tutorial Services. Students may use any drop-in service during operating hours without an appointment. Help is available on a first-come, first-served basis.

There are two one-on-one tutoring programs: the Weekly Assigned program and the Sign Up program. Frequent and consistent assistance is offered through the Weekly Assigned program. Weekly Assigned tutors meet with students at scheduled times throughout the semester at the library and other study areas on campus. Students who need or desire less frequent assistance make appointments through the Sign-up program. Sign-up appointments are held in the UTC's facility in Leazar Hall.

The Supplemental Instruction (SI) program provides group tutorial sessions to support learning in large lecture sections of chemistry, physics, computer science, and mathematics. The NC State program operates consistently with the national SI model of academic assistance. SI sessions are held three to four times a week and may be attended by any student in the targeted class.

- To whom is the strategy or initiative directed among first-year students?

The UTC helps first-year students with most of their courses, especially the more difficult ones. Students may receive one-on-one tutoring for two courses and may use drop-in services and/or Supplemental Instruction for most of the others. The Writing and Speaking Tutorial Service addresses concerns related to freshman (English and Composition).

Mathematics and science courses are targeted by a number of services--Supplemental Instruction, one-on-one tutoring, and drop-in centers. SI sessions are provided for all students in all first year chemistry courses. To answer the great need for assistance in freshman math classes, several options are available to students—the WITS drop-in center, Weekly Assigned tutoring, and Sign-up tutoring. Tutors for foreign language, economics, and other requested courses are provided by the Weekly Assigned tutoring program.

- Among these targeted students, how many or what percentage participate or benefit? If not all targeted students participate, how are participants selected?

All enrolled first-year students are eligible for tutorial services, and a substantial number elect to participate in one or another of the UTC programs. The freshman class at NC State numbers approximately 4000. Freshmen generally compose about one half of the clients using UTC programs.

Below are freshman attendance figures for UTC programs. For one-on-one tutoring, the figures include students who apply for assistance, but never actually attend a tutoring session.

One-on-One Tutoring (includes Weekly and Signup)

<u>Usage</u>	<u>Freshmen Users (Percent)</u>	
	<u>Fall '00</u>	<u>Spring '01</u>
8 or more	54 (21.0)	112 (26.4)
3 to 7.75	41 (16.0)	74 (17.5)
0.25 to 2.75	79 (30.7)	95 (22.4)
None	83 (32.3)	143 (33.7)
	257 (100.0)	424 (100.0)

Supplemental Instruction

	<u>Freshman Users</u>	<u>% Attend</u>	<u>Total Attendances</u>	<u>Attendances per Attender</u>
Fall 2000	848	42.4	3707	4.37
Spring 2001	485	37.1	2145	4.42

Academic Enrichment Center (now WITS)

	<u>Fall 2000</u>	<u>Spring 2001</u>	<u>Fall 2001</u>
Freshman Attenders	107	54	136
Freshman Attendances	271	113	345

Over 80% of the assistance in the AEC was in math courses. Other courses tutored include chemistry, physics, statistics, English, Spanish, French, economics, and computer science.

In fall 2001, freshmen accounted for 52.5% of all AEC attendances.

- What connections does the program or strategy have to formal classroom experiences and learning outcomes?

The Supplemental Instruction program is directly connected to selected “high risk” courses. The student “SI Leader” sits in on the class, takes notes, and does homework assignments in preparation for the SI sessions. Participating instructors are required to promote the service and treat the SI option as a recommended study strategy.

Most programs sponsored by its student users, among other methods. Success is looking at grade achievements of its student users, among other methods. Success is judged based on grades, frequency of tutorial assistance, and estimated academic ability.

- What qualitative or quantitative assessment data are available to suggest effectiveness?

User surveys reveal general satisfaction with Tutorial Center programs and employees. The following is survey data from all tutorial center users.

<u>One-on-one tutoring:</u>	<u>Fall 2000</u>	<u>Spring 2001</u>
- Has tutoring helped to improve course grade?	3.21	3.40
- Satisfied with Tutorial Center services?	3.57	3.67

(Yes, a lot = 4; mostly = 3; Sometimes = 2; Rarely = 1; Never = 0)

Supplemental Instruction, Spring 2001

- “How helpful were SI sessions in improving your grade for this course?”
-Mean = 2.77, n = 258
- “How helpful were SI sessions in helping you better understand course content?”
-Mean = 3.21, n = 258

(Extremely = 4, Very = 3; Fairly = 2; Somewhat = 1; Not at all = 0)

Grade increases have been documented for freshmen using Supplemental Instruction and tutoring:

Supplemental Instruction

	<u>Fall 2000</u>		<u>Spring 2001</u>	
	<u>Course</u>	<u>AI*</u>	<u>Course</u>	<u>AI*</u>
	<u>Grade</u>		<u>Grade</u>	
Attendances	2.72	2.97	2.74	2.88
Non-attendees	2.50	2.98	2.53	2.99
Differences	+ 0.22	- 0.01	+ 0.21	- 0.11

* Admissions Index, a GPA predictor.

<u>Attendance Level</u>	<u>Fall 2000 Course Grade</u>	<u>Spring 2001 Course Grade</u>
None	2.50	2.53
1 or 2	2.66	2.63
3 to 5	2.61	2.64
6 to 9	2.88	2.96
10 to 13	2.99	3.01
Over 13	2.93	2.85

Mean Grade in Course by Total Usage (Weekly and Signup Tutoring).
Average Grade

<u>Attendance Rates</u>	<u>Fall '00</u>	<u>Spring '01</u>
8 or more	2.61	2.44
3 to 7.75	2.19	2.34
0.25 to 2.75	2.10	2.52
None	2.28	2.64

Because the Undergraduate Tutorial Center offers assistance in a number of forms, a complete assessment of grade results must account for all services utilized by students in a particular course. This is most important in courses such as CH 101, where a substantial number of students use tutoring and/or Supplemental Instruction and/or the SI Chemistry Walk-in Center:

For Freshmen Taking CH 101, Spring 2001:

<u>Usage Group</u>	<u>Grade in Course</u>	<u>n</u>	<u>Avg. AI</u>	<u>Total Hours</u>
No Program Usage	2.22	339	2.88	0
SI and/or SI Walk-in	2.55	316	2.84	4.11
SI and Tutoring	2.70	13	2.72	9.69
Tutoring Only	2.06	6	2.76	5.21

<u>Avg. Total UTC Hours</u>	<u>n</u>	<u>Grade in Course</u>	<u>Avg. AI</u>
Over 14	13	2.77	2.69
9 – 14	32	2.84	2.86
5 – 9	35	2.89	2.79
2 – 5	93	2.43	2.83
0 – 2	162	2.47	2.84
None	339	2.21	2.88

- How long has the program strategy been practiced? How has it evolved?

The program strategy is molded by the curriculum for the tutor-training course, which was developed in the 1980s by two NC State faculty members, Norman Sprinthall, a developmental psychologist, and Lois Thies-Sprinthall, an educator whose interests were in mentoring and training. Tutoring under this model has been offered to NC State students for approximately 15 years. In the late 1980's, Supplemental Instruction, a nationally recognized model of academic assistance for "high-risk" courses, was added.

- Have others emulated the practice, or has it received formal recognition for effectiveness?

Our vision for successful tutor training has been documented in a tutor-training video series called "A Look at Productive Tutoring Techniques." At last count, the video series had been sold to approximately 150 colleges and universities in 44 US states, Canada, and Ireland. Members of the Undergraduate Tutorial Center staff regularly make professional presentations on curriculum, services, and assessments. Director Ken Gattis and Supplemental Instruction Coordinator Karen Jorgensen have given invited presentations on the training curriculum. Ken Gattis served as consultant for TutorLink, a new tutor-training program developed by World Book.

- What is the source of funding? Is the funding available?

The Provost of North Carolina State University funds Undergraduate Tutorial Center programs through the Division of Undergraduate Affairs. Funding is generally adequate for current needs.