Survey finds that students value Tech’s academic challenge, want more consistent teaching quality

Dan Treadaway
Institute Communications and Public Affairs

The critical importance of the student-faculty relationship was driven home by the results of a recent survey of Tech undergraduates’ observations about the education they receive here. The survey results were released last week.

In an online survey and four follow-up focus groups sponsored last spring by Vice Provost for Undergraduate Studies Bob McMath, students were asked to respond to two questions: “What is it about your educational experience at Georgia Tech that you most value and would not want to give up?” and “What one thing would you most want to see changed to improve the education of future students?”

Analysis of the responses

A total of 222 students responded to the online survey, and 25 students followed up on the two primary questions as well as others through participation in the focus groups.

McMath has prepared a report summarizing the survey’s results. The report consists of a set of tables in which open-ended responses have been collapsed into a set of categories arranged by type. The tables are accompanied by a narrative built around student responses.

Jon Gordon, assistant director of the Office of Assessment, was part of the team that conducted the analysis of the responses.

“For each student response, we documented a single word or phrase that essentially captured the gist of the response,” Gordon explained. “Many of these words and phrases repeated themselves. After looking at this list of words/phrases, we created broad categories to encompass the range of positive and negative experiences.”

The team then agreed on how certain key words or phrases would be used to classify a student response. While I would never present this as a rigorously scientific analysis, I’m confident of its usefulness,” McMath said. “The student responses are extensive and specific, and they are consistent with Tech students’ responses to national surveys. Perhaps even more telling, faculty and students with whom I’ve shared these findings have said they are pretty much what they would have expected to hear.”

The results

Responding to the survey’s first question on what they would not want to change about the Tech academic experience, 151 students said they valued the rigor and challenge of Tech’s academic programs. 81 mentioned the value and prestige of a Tech degree, and 105 characterized the teaching and support they received from instructors as being very favorable.

“The largest number of responses to this question had to do with valuing the rigor and the hard work associated with a Tech degree,” said McMath. “This tells me that students are well aware of the value their degrees will have in the job market.”

As one freshman student put it, “Tech is a pretty prestigious school. People are usually really impressed when you tell them you go to Tech. I’d like to keep that. I also like being challenged and being held to a higher standard.”

In response to the second question on what they would like to see changed, 182 students cited ineffective teaching or unresponsive instructors. “In fact,” McMath said, “most of these comments were mirror images of the positive ones.” Some students pointed out the need for greater preparation and screening for teaching assistants (TAs) and better communication between TAs and professors.

“Among these comments were a number of suggestions for improving various parts of the curriculum,” McMath said. “In most students’ minds, ‘needs improvement’ was not synonymous with ‘lowering standards,’ and some of them acknowledged that not all students are living up to their end of the bargain, either.”

Survey continued, page 3

Georgia Tech joins university consortium as part of unique computer network

Sean Selman
Institute Communications and Public Affairs

Georgia Tech is to play a critical role in a unique consortium of leading research universities and private companies. The National LambdaRail (NLR) — coming online across the United States through 2003 and 2004 — will allow Georgia Tech and other universities to take their expansive computer networking infrastructure to a new level of excellence in terms of speed, cost and adaptability.

The establishment of the National LambdaRail gives Georgia Tech, Atlanta and the entire Southeast a world-class infrastructure for scientific collaboration. Few areas in the world can match this research capacity,” President Wayne Clough said.

“Access to this new optical infrastructure will play a key role in boosting research across the Southeast and it has the potential to strengthen our economy by boosting basic and applied research,” Clough said.

The new network will provide a direct connection to the Southeast’s growing high-speed Internet access and, in the long run, allow this region to be part of the global Internet community.

The backbone of the NLR networking infrastructure will be a pair of 40-gigabit-per-second connections that will transmit data at the speed of sound. These connections will be made available to the NLR through Georgia Tech's Atlanta connection point for LambdaRail, which is expected to dramatically boost national research efforts in computational science, engineering and medicine, among many other disciplines. Georgia Tech has joined the effort to form the nationwide network, which designers estimate will have a bandwidth capacity of 40 gigabits per second.

Establishment of the National LambdaRail was supported by a $325,000 grant from the National Science Foundation and a $225,000 grant from the Georgia Commission on Higher Education.

“LambdaRail gives Georgia Tech, Atlanta and the entire Southeast access to a new level of excellence in terms of speed, cost and adaptability. It is intended to be a significant advance for research and education in the Southeast and to stimulate economic development,” said Henry Horn, professor of computer science and director of Georgia Tech’s Institute for High-Performance Computing and Communications.

LambdaRail is a result of the university system’s decision to develop a high-speed, high-quality network for use by faculty, students and staff. Georgia Tech's $325,000 grant will build the campus-based infrastructure that will connect to the Atlanta connection point.

The network will use standard optical fiber to connect to the internet at a very high speed. A fiber-optic link can carry 100 times the current copper connection capacity and, because it uses light rather than electricity, it is immune to noise and other such problems.

LambdaRail is built around a technology known as asynchronous transfer mode (ATM), which allows for a high-speed transmission of information on a dedicated circuit.

Though it doesn’t officially begin until Oct. 1, the annual statewide Charitable Campaign informally got under way last week when many employees received pledge cards.

Tech’s campaign facilitator, Carolyn Schneider, said her committee has set this year’s goal at $325,000, a 1.5 percent increase from last year.

Above, Campaign Chair Pete Dawkins and Co-Chair Gary May hold the Governor’s Cup — awarded to the school in the University System with the largest increase in contributions to the program — an honor Tech has held for three years.
In the medical world, we like to use the phrase ‘from the bench (science) to the bedside (patient).’ There has to be a bridge between science and patients, and technology is that bridge.

—Larry McIntyre, chair of the School of Biomedical Engineering, on the future of medical innovation. (Atlanta Business Chronicle)

“Quite frankly, one of the reasons that systems have been insecure in the past is that customers have been willing to pay for insecure systems and have used those insecure systems and have just put up with the fact that they’re insecure.”

—Ralph Merkle, director of the Georgia Tech Information Security Center (GTISC), on why computer systems continue to be vulnerable to virus and worm attacks. (Atlanta Business Chronicle)

Gardening at Georgia Tech

What to plant?

TRYED AND TRUE

Trees: Willow oak, red maple, sugar maple, crape myrtle, zelkovia, magnolia, dogwood, Yoshino cherry

Shrubs: Hollies, junipers, abelia, spirea, fragrant rose clive, Indian Hawthorn, azaleas, crape myrtle, hydrangeas, camellia, acadian

Groundcovers: Daylily, juniper, knoppe, ivy

NEW VARIETIES

Trees: Rounse wil, Nutall oak, Little Gem magnolias, Okame cherry


Tech horticulturist Tony Turner transplants a holly bush

For the last few years the landscape industry has been trying to promote a “Fall is for Planting” program. This is not only a sales promotion, but also a very smart idea. We love to plant in the spring when the flowers are blooming and the weather is nice, but fall is actually the best time to plant trees and shrubs.

Why? There are several reasons:

• Plant foliage growth rate has slowed down due to cooler temperatures.

• Plants do not transpire as much, so they don’t lose as much water.

• Root growth continues during winter months to help establish a strong support system for the following summer.

To put it simply: less watering, less work! So here are a few ideas on how to help make fall planting projects a success.

Develop a plan

Put down on paper what you would like to plant. It doesn’t have to be elaborate, just a list of the types of plants and their general location in the landscape.

If looking for inspiration, borrow ideas from others. Take a camera and notepad and visit some of the metro area’s gardens. The Internet also offers a wealth of information.

Choose the location

Aesthetics are important, but so is practicality. Consider the surroundings carefully; envision the tree or plant at full maturity.

Bed preparation

Good soil preparation is essential for the success of any planting bed. It is the toughest part of the plan, but undeniably one of the most important. So dig, dig, dig, and loosen up that soil.

Most of our soils have a high percentage of clay, so adding soil amendments is beneficial. Soil conditioners, topsoil and composted manures are all good additives. My favorite combination is Nature’s Helper and Black Cow.

Plant selection

Pick the right plant for the right location. It’s important to pick the plants you like but they must be grown under the correct conditions to flourish. Watch how the sun travels through the yard to get an idea if a location is full sun, part sun or mostly shade. Some suggestions are listed above.

Be aware of moisture levels. Low areas in the shade do not drain well. Areas under trees will have to compete for light as well as water. The University of Georgia puts out a list of “Gold Medal Winners” which include plants that have proven to be successful in the hot, humid weather of the Southeast.

Plants

Planting is the fun part. First, place plants out in the bed to get a sense of what the landscape bed will look like. Dig the hole at least twice the size of the container, and add a slow release fertilizer to the planting hole at this time to provide season-long fertilization.

Mulch your bed with two or three inches of mulch such as pine straw or pine bark. This will help the soil conserve moisture and also help prevent weed seed from germinating. Water your landscape bed thoroughly and monitor the moisture level closely the first few weeks. New plants are very tender and susceptible to drying out.

IN BRIEF:

Immunization

According to Cindy Smith, director of Student Health Services, a limited number of flu shots will be available to members of the faculty and staff.

The cost to faculty and staff is $10. No appointment is necessary, and shots will be available from 8 a.m. - noon, and 1 - 4 p.m., Monday through Friday. Faculty and staff should first go to the cashier’s office, and then along the outside corridor (next to CRC construction) to the Blue Hall.

For more information, refer to www.health.gatech.edu or call 894-2584.

TEAM Buzz calls for volunteers

On Oct. 18, help build community both inside and outside of the Georgia Tech campus by volunteering in the Fifth Annual TEAM Buzz Community Service Day. Faculty, staff and students will unite together for one day in a collective effort to improve the city, participating in nearly 50 projects within the Atlanta area.

Registration begins Oct. 6. For more information, refer to www.teambuzz.org or contact Faculty/Staff Involvement Chair Josie Phillips at gle407@prism.gatech.edu.

WWW.WHISTLE.GATECH.EDU
Former senator visits with new Sam Nunn Security Program fellows

Elizabeth Campell

Institute Communications and Public Affairs

In a meeting with the first class of fellows in the new security program that bears his name, former Senator Sam Nunn said, "The United States is the world’s best at waging war, no question about it. But we need to learn a lot and think about conflict termination, peace making and nation building."

The program, funded by a $1.3-million grant from the MacArthur Foundation, is designed to help bring a new generation of scientific and engineering expertise to bear on critical international security issues.

"The United States and indeed the world is undergoing a technological and information revolution and together we must protect this generation and future generations from the dark side of this explosion."

Nunn said that challenges of governance, national security, economy and society and civic culture are major tests to international security.

"Bridges must be built throughout the world of science and the world of human relations," said Nunn.

"Bridges, which can give shape and purpose to our science, can breathe heart and soul into our new technologies. Together scientist and policy makers must help our citizens reap the benefits of our exploding scientific knowledge and together we must make sure that others do not misuse it, and together we must protect this generation and future generations from the dark side of this explosion."

Nunn said, fighting these threats requires international cooperation.

The recent trend toward unilateralism is a mistake, according to Nunn, the former chair of the U.S. Senate Armed Services Committee.

The Nunn Security Program is designed to bridge policy, technology and the scientific community. As part of this effort, the fellows participate in a weekly seminar featuring guest lecturers such as Nunn, representatives from the Council on Foreign Relations and faculty from the School of International Affairs.

For more information...

Sam Nunn Security Program
www.cistp.gatech.edu/cistp/SamNunn
School of International Affairs
www.intoa.gatech.edu

Tech2Nite offers moonlit, Midtown education in digital age topics

Tech2Nite, a new program offered through Georgia Tech’s Department of Distance Learning and Professional Education, puts a new spin on today’s personal enrichment courses.

"We hope to attract people who live, work and play in the Midtown community,” said Michael Coleman, director of sales and marketing for the Department of Distance Learning and Professional Education.

Between Oct. 14 and Nov. 18, courses taught by Tech faculty will examine the relationship between technology, communication and culture. The fall line-up includes courses in "Science Fiction and the High-Tech City;" "Law vs. Ethics in the Digital World;" "Digitalizing Your Cultural History;" "Performance Analysis of Rock and Popular Music;" "Fashioning Self and Place from the Romantics to the Postmodern;" and "Biotechnology in Popular Culture."

Each class begins at 6:30 p.m. at the Global Learning Center. For full course descriptions and registration, call 385-3542 or visit www.pe.gatech.edu.

For more information...

National LambdaRail
www.nationallambdarail.org

Survey, cont’d from page 1

In commenting on faculty-student relationships, a freshman said, "I would like professors to be more personable with students. I want to feel comfortable seeing my professor after class with questions rather than it seeming as though I’m taking up precious research time."

What the results show in a general sense, McMath said, is that students highly value the overall educational atmosphere, but they would like to see instructors adhere more consistently to established "best practices" of teaching. Those best practices, he said, can range from stimulating engaging class discussions (as opposed to simply reading off the text of a series of PowerPoint slides) to the consistent keeping of posted office hours.

The next steps

The findings of the study have been summarized in a report, copies of which will be available at various campus presentations over the next few weeks, McMath emphasizes, however, that the report is not the end of the story, but the beginning of a campus-wide conversation on the undergraduate academic experience.

"Communication and dissemination of the survey information is of course the first step," McMath said. "I will be making a number of presentations, including the President’s Cabinet, the deans and the school chairs. But I encourage any campus group who would like to hear this presentation to contact my office and schedule a time. What we want is for the campus community to review this information carefully and thoughtfully, and then think creatively about the role they can play as individuals or units in improving the education of future students."

"This report demonstrates a very constructive attitude among our students, even when they are expressing displeasure about some parts of their academic experience," said Provost Jean-Lou Chameau. "They have offered specific suggestions, both about what they value and what they would like to see changed. It’s important that our students and faculty now engage in the discussions that will grow out of this report, and I look forward to seeing the recommendations that will follow."
**C A M P U S  E V E N T S**

**Arts & Culture**

Oct. 5
The Ferst Center for the Arts presents Ballet Nacional de Cuba, at 3 p.m. Faculty and staff receive a 10 percent discount. For tickets, call 894-9600 or visit www.ferstcenter.org.

Oct. 9
The School of Literature, Communication and Culture of Ivan Allen College hosts the second annual Bourne Poetry Reading, featuring Edward Hirsch, Marilyn Nelson and Ellen Bryant Voigt, at 7:30 p.m. in the LeCraw Auditorium of the DuPree College of Management. For more information, refer to www.iac.gatech.edu/poetry.html.

**Brown Bags/Conferences/Lectures**

Oct. 2
The School of International Affairs, in cooperation with the Council on Foreign Relations ( CFR ), is hosting a debate at 6 p.m. in the Student Center Theater titled "Debating a New National Security Strategy."

Oct. 7
The Microelectronics Research Center ( MIRC ) hosts a talk by Ajay Bhatt, Intel Distinguished Lecturer, on "Creating Third Generation 1/0 Interconnect" at 10 a.m. in room 102A in the Pettit Building. For more information, call 894-9451.

Oct. 8
The DuPree College of Management’s IMPACT speaker series presents Karen Robinson, CEO of Prime Point Media, at 4:30 p.m. in the LeCraw Auditorium.

Oct. 9
The College of Computing’s GTSIC Distinguished Lecture Series welcomes Martin Hellman, professor emeritus of electrical engineering at Stanford University, on "The Evolution of Public Key Cryptography," at 2:30 p.m. in the MARC Auditorium.

**Faculty/Staff Development**

Oct. 14
The Office of Sponsored Programs hosts a class on "Philanthropy and Proposal Writing," from 2 - 4 p.m. in Room 119, Centennial Research Building. To register, e-mail nadia.zitman@osp.gatech.edu.

Oct. 16
CELT’s Faculty Development Seminar series presents "Maintaining Passion For, In, and About Your Teaching," from 11 a.m. - 1 p.m. Lunch will be provided for those who pre-register at 894-9418.

**Miscellaneous**

Oct. 6
A representative from Fidelity Investments will be on campus from 9 a.m. - 5 p.m. for confidential retirement consultations. Call 800-642-7131 to make an appointment.

Faculty and staff should send calendar events to: editor@icpa.gatech.edu

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**CLASSIFIEDS**

**AUTOMOBILES**

1975 Ford F-100 pick-up, manual shift, longbed, runs well, needs steering work, $750. Call 894-5686 or e-mail swandik@bellsouth.net.


1990 Mercedes Benz S500, 4-door sedan, auto, champagne, leather, power sunroof, sunroof, power windows, a/c, AM/FM/CD. Excellent condition. All maintenance done by same mechanic. 175 miles, $7,000. Call 770-998-0052.

1992 Ford Crown Victoria LX. Auto, fully loaded, a/c, leather, AM/FM/cassettes, premium sound, power everything, keyless entry, air-conditioning, cruise condition, 998 HW miles, $3,200 OBO. Call 678-207-7350.


1997 blue Mitsubishi Mirage. In good condition. 868 miles, 2-door, automatic. Asking $2,700 negotiable. Call 404-579-4582 or email tg2@isye.gatech.edu.

2000 Mitsubishi Eclipse GT. Original owner; silver with black leather, 5-speed; nose bra; installed laser/radar detector; loaded; all service records; brakes replaced this year; $10,500. Email rick.duke@edl.gatech.edu or call 770-654-0771.

2001 Ford Expedition. Eddie Bauer, red, fully loaded, AM/FM/cassette, DVD/CD changer, beige leather seats, sunroof, 67K miles. Excellent condition. $25,000 OBO. Email jgard@bellsouth.net or call 770-589-1775.

2002 Black Nissan Xterra SE. Supercharged, 19K miles. Fully loaded, new condition. 3.3L, 6 cyl., 210, lots of extras, $20,000. E-mail dari.molavi@gtri.gatech.edu or call 894-4352.

Oct. 7
Dell Inspiron 8200; Pentium 4, 1.8GHz, 512MB RAM, 40GB hard drive, WinXP, Office XP, 2 batteries, DVD, CD, 15" monitor, external ethernet/wireless ethernet. Leather case. $2,000 OBO. E-mail dari.molavi@gtri.gatech.edu or call 894-4352.

**Furniture**

Couches, loveseats, recliners, tables & bedroom suite for sale. All in great condition. Pictures available. Pieces sold together or separate. Prices negotiable. E-mail runi@housing.gatech.edu.

New oak dining table w/wrought iron base. Round, w/leaf to extend to oval, $175. Also, 4 matching dining chairs, new, $140. Take all for $300. Call 770-531-7497.

Very nice 6-piece bedroom suite. $2750 OBO. Dining room table set w/4 fabric chairs), $100. Other items are available upon request. Pictures available. Call Shirley at 894-3012.

Girls dresser w/mirror & desk w/chair. White trimmed w/gold. (French Provincial-1960’s). Dresser is full-size. Dresser, desk & mirror in good condition. Chair worn but still sturdy, $175 for both. lisa.gardner@gtri.gatech.edu.

**REAL ESTATE/RENTALS**

Two attractive apts. in former single family home in Home Park. $950 for 2BR upstairs; $900 for 1BR down stairs. Deep lot on quiet street, ample closets. Call 404-816-8370.

4BR, 3.5BA house in Smyrna for rent or sale. Built in 2001, this house has 3 fireplaces, granite counters, hard- wood floors, stacked stone, etc. Appraised for $348K, will sell for $292K. Call 404-513-9807.

Room for rent in furnished house less than 1 mile from Decatur Square. Seeking female, non-smoker graduate student or professional who likes animals. Rent $317/month + utilities. E-mail marsha.allen@catea.org or call 358-0871.


**SPORTS/FITNESS/RECREATION**

Callaway Great Big Bertha Hawkeye VFT 10-degree driver, regular graphite shaft, titanium head. Hardly used. Paid $599, asking $200 OBO. Call 678-614-8111.

**MISCELLANEOUS**

ANC registered Boxer puppy, 7 mos. old male, reverse brindle. Beautiful puppy needs someone who can give him lots of attention. Call Deanna at 770-919-9655 or e-mail deannashaddah@gmail.com.

**EDUCATION**

Editor’s Note: Only active members of the faculty and staff may submit classified ads, which will run for a maximum of three weeks in the order in which they are received. The Whistle reserves the right to edit ads longer than 30 words.

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September 29, 2003