ThinkBig communities connect students with faculty

By Craig Tabita
Online Editor

A new housing option called ThinkBig has allowed students with a common interest to live together and participate in themed faculty-led group activities. While the program aims to enhance the college experience for its participants, organizers hope it grows as it may eventually be the cure for faculty-student disconnect all over campus.

The ThinkBig program was introduced for this school year with six living-learning communities on topics ranging from “Technology and Outdoor Urban Adventures” to “Humor and Innovation.” The communities meet once a week, typically in a book club or coffee house type setting, and there are monthly outings that depending on the group can include hikes, seminars, movies or comedy shows. The program lasts for the fall and spring and students pay $150 per semester to participate.

About 200 students participate in the program currently, according to program organizer Dana Hartley, director of Undergraduate Academic Advising. She says she hopes that number will double next year and increase from there.

“It’ll depend on students deciding they want to participate, but we hope to see a lot of students participating on campus to impact the culture and improve faculty-student interaction,” Hartley said.

The program’s benefits are apparent to Chiara Caesar, fourth-year BME and a housing resident advisor participating in a group titled “Human Attention: How Far is Too Far?” She was also a resident advisor last year and sees a difference in her residents.

“The students in the program are so much more engaged and they know each other. They really feel part of something bigger outside of classes,” Caesar said.

“Human Attention” is led by Steve DeWeerth, a BME and ECE professor, and the group discusses “the societal, intellectual and ethical aspects of integration of human and machine,” according to its description. Its weekly meeting is a Tuesday night book club based on non-fiction works centered around human augmentation; they’re currently reading one called “Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future.” They also went to see the film Surrogates, which is based on a future of isolated humans who interact through robot surrogates, and followed it with dinner and discussion.

A second community, “Humor and Innovation,” is exposing its participants to a variety of comedy and making connections between humor and technical pursuits. The program’s leader is Pete Ludovice, a CHBE professor who uses humor not only to make lectures more interesting but also is a stand-up comedian who performs regularly at comedy venues around Atlanta.

Participant Jessica Arnold, second-year PSYC, enjoys being able to interact with other people who make her laugh and being able to make them laugh, but also hopes that developing her sense of humor will have professional implications. “I think [humor] helps me because in psychology you want people to open up, if you can talk to them in a relaxed way and get them to laugh, that can be really good therapy,” Arnold said.

Their Tuesday meeting was an improv workshop taught by Troy Halverson of the Redesigned Human of the Future. Guiding the students in the workshop was an improv workshop taught by Troy Halverson of the Redesigned Human of the Future. Guiding the students in the workshop was an improvisation Manager for the Information Security Center and OIT Outreach Coordinator, is helping a panel-discussion on the potential risks students unknowingly face when using social media sites.

The panel will take place in the Klaus Atrium between 8:30 a.m. and 11 a.m. on Oct. 29.

According to Richard Biever, Policy and Compliance Manager for the Information Security Center and OIT, one of the panelists for the event, says that the privacy implications of social networking deserve more attention than most are giving them. Biever said, “There really is no way of avoiding privacy issues these days, but [you can protect yourself] by taking steps to look at all the settings available, and making sure that whatever you do on your computer is completely up to date, has active virus and up-to-date antivirus software, and has secure passwords.” According to Meyers the same attitude should be taken towards any and all information posted online. No homeowners would post a sign in their front yard, declaring that a family vacation will result in the home being left unwatched for a week, yet Meyers says it’s fairly common for any one doing so on social networks.

Meyers said, “Posting status updates online… if you have the proper settings, I can see who can get there. They just don’t want to go in there to modify those settings… There’s nothing to prevent employers from viewing the information, collecting the information, and keeping the information on record… once you’ve given that pet person that knowledge, it affects the entire interview process. While they can’t necessarily grade you on that on paper, in their mind, they’re already assessing you before they’ve even gone through the process of checking your true candidacy.”

Biever said that Tech frequent-
CoC receives $1.4 million from NSF for outreach program

Tech’s College of Computing received an additional $1.4 million from the National Science Foundation (NSF) for its Georgia Computes! (GC) program to extend the program for another two years. GC, which was originally funded through a three-year long grant, is a statewide program working under the Broadening Participation in Computing (BPC) program to improve computing education throughout all levels of education (from primary school to the undergraduate and post grad levels).

“Our main goal is to broaden computer science education,” said Dr. Mark Guzdial Professor at the College of Computing and principal investigator of GC. GC also has a focus on recruiting students typically underrepresented in the computing community. GC works to recruit minorities, women and persons with disabilities and develop an interest in computer science (CS) in them so that they will continue an education in CS.

“This is important because computing technology surrounds us all the time and the way it is designed affects our day-to-day lives. A more diverse workforce can create computing applications that better meet the needs of the public,” said Dr. Amy Bruckman, associate professor at the College of Computing and coprincipal investigator of GC.

GC’s strategy is to improve the overall quality of CS education. They run workshops and summer programs at the middle and high school levels to make experiences with CS more interesting so students want to explore CS further at higher levels of education. GC also works in high schools to increase the number and quality of CS classes by training CS teachers and improve the quality of the curriculum taught in high schools.

“There is evidence that the people most hurt by a bad education are those in a minority group, because they are already questioning ‘Do I belong here? Do I belong in this field?’ and when things are bad, they are most likely to say ‘oh I really don’t belong here.’ We’re trying to make computer education better and by doing so broadening those who study it,” Guzdial said.

GC intends to use the $1.4 million to implement new programs. They intend to set up more online training for teachers as well as improve the process of getting online certification to teach Computer Science.

“We currently teach high school teachers in summer programs and through workshops during the year but if we can get it online through webinars and such it will be easier for them to get training,” said Guzdial. There will also be a big push to track the progress of students.

“One of the things NSF wants to know is all of this working? Are we actually making things better? A teacher goes through the program and you would hope that they will be a better teacher and more students will be interested in CS but currently we don’t have any way of seeing if this is true,” said Guzdial.

Part of the plans for the next two years is to go through the University System of Georgia’s schools and survey the students in introductory CS courses to find out where if they took one of the GC workshops from a teacher that went through GC training.

GC also intends to use the $1.4 million to continue their existing programs which include helping other universities around the state start outreach programs. The universities can then offer summer programs to middle and high school students in GC, teach workshops to university faculty on how to run these kinds of summer camps, workshops with girl scouts and YWCA and various programs, training for high school teachers.

Among the current programs is a project called Glitch. Glitch targets African-American teenage males, who, while usually displaying an interest in video games and sports games, typically do not pursue a career in computer science. Glitch attempts to leverage the passion of video games to an interest in CS.

Glitch provides the opportunity for these young men to work as video game testers and write bug reports for companies. The work with video games is integrated with introductory CS and over time participants are prepared for an education in CS as opposed to simple video game testing.

GC received its initial three-year grant in 2006. At the end of the next two years, GC can apply for yet another extension to support the program for another 5 years. If GC gets this money, they intend to expand the program to other close by states.

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Student awarded prestigious Astronaut Scholarship

By Andrew Nelson
Contributing Writer

From high school to his third year at Tech, as an ASTES member, Jonathan Walker has contributed to his community in the name of science, and his deeds have recently been rewarded by a $10,000 scholarship from the Astronaut Scholarship Foundation (ASF).

Astronaut Charlie Duke visited campus on Sept. 22 to present Walker with the scholarship on behalf of the Astronaut Scholarship Foundation.

Since 1987, the Astronaut Scholarship Foundation has awarded scholarships to science and engineering students with demonstrable leadership, creativity and excellence in their field.

Walker has accomplished just that, researching spacecraft propulsion systems and tutoring grade-school children through the Center for Pan Asian Community Services.

The center is a nonprofit organization that contributes social and health services to immigrants, refugees and racial-ethnic minorities in Georgia facing difficulties.

He says that a majority of his students and after-school program participants are Hispanic, Vietnamese, and Burmese immigrants.

Walker’s research focuses on improving efficiency and speed of propulsion systems by accelerating ionized gases that could move the projectile at speeds tens of kilometers per second. His current project in this area is developing carbon nanotube cathodes, which could obviate the use of extremely hazardous and limited, in the context of spacecraft applications, chemicals currently used in propulsion systems and greatly improve efficiency.

Out of school, Walker tutors and teaches a science-enrichment after-school program for children in middle and high schools. Meetings are often based around a cool science demonstration or hands-on activity.

“In one experiment, I put enough rockets on a sled to accelerate it to about 40mph, and I gave the kids very simple materials to protect an egg that is transported by the sled.” Walker said, “I like doing things for the kids that they wouldn’t be able to do or see otherwise because of the district they’re in or their economic status.”

Though the State of Georgia and other private contributors finance the general tutoring, Walker most often pays for his after-school programs out of his own pocket, which he is happy to do in the name of science education.

Assistant Professor of Aerospace Engineering Dr. Mitchell Walker, who also heads the High-Power Electric Propulsion Laboratory where Jonathan Walker works on research, nominated him for the scholarship.

For the future, Walker is interested in NASA, and with the Space Shuttle Program phasing out by 2010 and the Constellation program taking over, preference for military-trained astronauts has decreased as openings for civilian engineers and scientists have increased.

Another difference between Tech’s implementation and that of other universities is that faculty whose salary pays them nine months of the year, receive an additional month’s pay for participation in the program. Hartley said this is one reason Tech has a high level of faculty participation compared to other schools, where participation is often voluntary.

“The pay is a stamp of ‘Yes, this matters to Georgia Tech…’ We engage faculty at a level that other campuses can’t,” she said.

As a new program, the program is working on building awareness among students. Hartley said that last year more proposals from faculty came in than were able to be accommodated, and fewer students applied than she would have liked. But she cited the I-House and WST as living-learning communities that started small and now have to turn away applicants due to lack of space.

Signing up for ThinkBig is part of the spring housing registration process. It will not be known until spring which programs will be available, but Hartley has invited students to contact her with suggestions for faculty members who might make good community leaders.
Bievers points out that, despite tending to be more tech savvy, having grown up with the Internet, younger people are less bothered by having large amounts of personal information available online.

Ahmad said that students aside from being okay with information available, the current generation actually further the availability. Ahmad said, “I think younger people are more eager to share more information about themselves and their friends than previous generations.”

Despite the risks, both Meyers and Biever agree that social networks are incredibly useful tools, and don’t want to scare people off from them.

Meyers said, “There’s a lot of good in these social networks, and I don’t want to discourage people from using them, because they’ve got a really good foundation, and do add a great aspect of networking with colleagues that we’ve never had before.”

Ahmad said, “I think we need to do our part to stay safe in cyberspace the same way we exercise caution in the real world. We need to keep in mind that there are very serious threats out there. Use caution and be smart about it. In the online world, everything may not be what it appears.”

Biever offers the same advice.

Biever said, “There’s a saying in the security world: Trust but verify. It’s the same situation with social networks.”

Six panelists are lined up for the event, representing several different ways of approaching the issue. Shelley Hildebrand, senior attorney for Tech, will represent the legal aspects of social media and the risks and liabilities thereof.

From the professional viewpoint, Paul Judge of Purewire and Chris Rouland of Endgame Systems will be giving the industry perspective.

As mentioned before, Meyers of OIT will be at the discussion, and Ralph Mobley, Director of Career Services, and Kapil Singh, a PhD student in the College of Computing, will also be representing Tech.