

Convergence

News from
The Center for Telecommunications Systems Management
Spring 2006

ATSM Activities Keep Students Busy

The Association of Telecommunications Systems Management (ATSM) started in 1999 and has increased in number every year, ending the '05 fall semester with 40 students. With that many active students, it has been easy to plan valuable guest speakers and events.

September started off with a trip organized by one of ATSM's faculty advisors, Marcia Combs. Fifteen members took a trip to Indiana University-Purdue University in Indianapolis. The two-day trip included taking a tour through the network operating center at the university to see networking in action.

Shortly after returning from their trip, ATSM members had a very important guest speaker, ITERA President Rick Gershon.

Find out more about ITERA at
<http://www.itera.org>



Gershon visited MSU to officially recognize ATSM as the first ITERA student chapter. Gershon greeted

members and spoke to them about the importance of student chapters like ATSM and the possibility of growth in the future for other ITERA student chapters.

ATSM members received the benefit of hearing from two other very important professionals. They were first visited by a member of the FBI, Phil Lewzader, who talked about IT related security projects he has been involved with. The second guest speaker was Wes Kerr from ConnectKentucky who talked to the group about ConnectKentucky's activities and ways students could get involved.

Members have also been involved with a few professional conventions this past month including the Rural Telecon conference in Louisville, Ky., hosted by ConnectKentucky and the National ITERA conference in Las Vegas. Other members are busy with an iPod Nano fundraiser event, and CCNA certification study groups.

Future events include guest speakers Robert DuCharme from Cisco to talk about Cisco technology, and Janice Thomasson, the Murray State CIO. A few of the students will even be heading to Paducah at the end of the semester to test for CCNA certification.

The Director's Chair

We have a new name and a new look. The telecommunications industry is undergoing dramatic changes and one of the words you hear most often is Convergence. If we look at a dictionary we see a definition of Convergence that includes things like "the coming together toward a common point," or a "meeting place or a point of converging." With this in mind the naming of our newsletter as *Convergence* seems to fit both the industry and the TSM program at Murray State. The TSM program brings together the strengths of the College of Business and Public Affairs with the strengths of the College of Science, Engineering and Technology. Our new look is the result of hard work by Dana Starnes. Dana joined the center staff at the beginning of the fall semester. Dana will graduate from Murray State in December with a degree in public relations and a minor in TSM. Dana is hard at work on several projects to improve the image of the MSU TSM Program of Distinction.

Dr. Mike Bowman and I have had fun this fall blowing things up and working with robots as part of a grant with the University of Louisville from the Department of Homeland Security. You'll have to read the article to see why the activities this fall were called "Operation DUKES of Hazard."

Our National Advisory Board that we introduced in our

last newsletter has been active during the last few months. Some of the ways they have been involved in our program include: Dr. John Able, from United States Telecom, has been instrumental in linking ITERA to his annual meeting; Cynthia Brumfield, from Broadband Intelligence, Inc., and Bob Du Charme, from Cisco, were speakers at our ITERA conference in October; Dick Anderson, from BellSouth, has assisted us in getting a grant from the BellSouth Foundation to move our master's in TSM completely online. The plan is to have the TSM M.S. ready for online delivery by fall 2006. Jim Graham, from the University of Louisville, has led the Homeland Security grant that we have been working on this year.

We are on the move and many positive things are happening. The *Convergence* will keep you up-to-date on TSM and how we are the place where telecommunications and business are coming together at a common point.



Jim Gantt

Operation DUKES of Hazard

In September, Dr. Gantt was involved in an unusual event held in Leatherwood, Ky., neighbor to Hazard, Ky. Terrorists, fires, chemicals, guns and robots were all a part of the Demonstration of Unique Kentucky Experimental System, a program designed to test new communication technology for rural environments. This life-like scenario was conducted over two days: Law enforcement determined that something strange was going on in an abandoned coal mining community. Using satellites to survey the area they determine that a major meth lab is in operation and a harmful bomb is in the process of production by terrorists within an abandoned building. A U.S. Army PACBOT is sent into the building first to search for the bad guys by climbing stairs and debris. The terrorists, knowing they are under attack, blow up the mobile home meth lab nearby through cell phone communications. The instrument being tested, the MITOC, which is an operation center used out of the back of a well-equipped suburban, then has to monitor a cloud of hazardous fumes drifting towards nearby civilian areas. In the end, the bad guys were apprehended, the weapons taken away, and the new technology showed its strength. These types of real-life situations are used to determine what technology might be needed in the future. This test was conducted by the University of Louisville, Kentucky Community and Technical College System, Murray State University, U.S. Army Research Laboratory, PlanGraphics, Inc., Perry Co. Fiscal Court, and the Hazard Fire Department.

<http://www.murraystate.edu/tsm>

High School Students Get Into the Cave

TSM's CyberCave has become a hit with high school age students. This year, classes from schools all over Kentucky, Southern Illinois and Tennessee took a day away from the books to get some hands-on fun with technology at MSU.

The TSM program provides transportation expenses for each school that visits. The students are also treated to lunch at Winslow Cafeteria free-of-charge.

As students arrive at the I.T. Building at MSU, they are led to a room that is painted like a dark cave. A laser light from the ceiling blazes "Welcome to the CyberCave" and rock music is being played as the students are asked to grab a seat anywhere in the Cave.

In the Cave, directed by John Hart and five student workers, students become part of a business "network." On this network, they learn how things such as telephony, email and video transmission work. With this hands-on experience, students get an idea of how businesses use telecommunications every day.

Fun activities include learning about Personal Digital Assistants (PDA) and competitions unraveling encryption puzzles. Students have several chances to win CyberCave prizes like T-shirts and light-up pens. The students also get a chance to play with a hand-made robot that can walk, talk and light up.

Occasionally, there are special visitors to the CyberCave, such as Paducah representative Frank Rasche, who checked out the cave earlier in the fall semester. Representative Rasche enjoyed watching the students learn about telecommunications and felt like the CyberCave is a good chance to introduce business technology to students entering into college.

At the end of the day, students get to listen to information about the TSM program and the housing scholarship available to students who are declared under TSM. Each student has the



chance to hear from and talk to college students in TSM to understand what kind of classes the program includes.

High school students who visit the cave are also introduced to the summer Cyber Academy, which is a five-day camp where students can stay on the MSU campus for free. Sixteen students are chosen for each of the three camps. Students who have attended the summer camp before are invited to attend the Second-Year Cyber Academy, which includes the advanced information of what they learned in the first camp.

For more information and pictures
from the CyberCave visit our website at:
<http://campus.murraystate.edu/tsm/cybercave>

CONFERENCES IN 2005

ITERA National Conference

Adam Hedges and Stephen Mizell, ATSM president and vice president, spent a week at the Venetian hotel in Las Vegas attending conference meetings and networking with distinguished telecommunications professionals from all over the country. This busy week in October was the ITERA National Telecom Conference, held once every semester. Because Murray State is a founding member of ITERA, who accepted ATSM as their first ITERA student chapter, Murray State faculty and students have a big part to play at the conference. The students helped host the ITERA table alongside Dr. Gantt, who was program director of the conference. ITERA had 12 member schools in attendance along with several schools that have the possibility of joining later on. The next conference will be in March of 2006

Rural Telecon Conference

This past October, Dr. Gantt and six TSM students spent a week in Lexington, Ky., for the annual Rural Telecon conference to learn about the telecommunications field. The conference, hosted by ConnectKentucky, provides a great opportunity to network with telecommunications professionals from around the country, including successful Murray State graduates. The ATSM students interacted with companies such as Bell South, Access Cable Television, Broadband Horizons, Lexmark, Wireless Connections, and Southeast Telephone. One student who attended the conference, Al Grant, won the first door prize at the Governor's Banquet, a brand new 2 Gig iPod Nano. Besides the iPod, Al found the trip to be very rewarding in other ways. "This type of conference allows us to put a totally different perspective on the advancements taking place in the industry and how our education applies to that advancement."

TSM

SPOTLIGHT

Dr. Mike Bowman

Dr. Bowman joined the TSM family as an assistant professor in August of 2005. He has a Bachelor of Science in chemistry from Ouachita Baptist University, a master's in information systems from the Naval Postgraduate School, a master's in strategic studies from the U.S. Army War College, and a more recent Ph.D. of information technology from George Mason University.

Along with all of this, Bowman is a member of the IEEE, ITERA, ACM, AAI, AFCEA and is currently nominated to be the chairman of the NATO Technical Group on Military Communications for Urban Operations (NATO – North Atlantic Treaty Organization).

Originally from Chicago, Ill., Bowman has lived and worked all over the world during his 26+ years of military service. He retired from the Army in 2005 as a colonel, and then decided to apply at universities all over the Midwest and East Coast. Even though he had 10 job offers, he chose Murray State because of its location, school size and balance between research and teaching.

Even with his busy schedule, Bowman likes to spend time outdoors with his wife, Cindy, and 14-year-old daughter, Rachel. They all enjoy boating and fishing and he also enjoys woodworking and computer games in his spare time. If asked, Bowman will also tell you about his days as a drummer. "I played in a rock band in high school and in college and would like to play in an "old-guy" rock band in this area."

Phil Schooley

Phil Schooley, who joined our staff in September of 2005 as the TSM online advisor, is a Murray State alumnus. Schooley started work at MSU after retiring from Missouri Public Schools with 33 years of teaching in industrial technology and computers.

He is originally from Kinmundy, Ill., but moved on to receive his BSE from Murray State and his MAT from Southeast Missouri State University. After being active in several different types of school systems, one of Schooley's favorite things about Murray State is the friendliness from the people of the area.

At home, Schooley spends time with his wife Virginia, celebrating their 34th year together. Their son, Brian, and daughter-in-law, Michele, both graduates of the MSU Education program, are the proud parents of Schooley's 3-year-old grandson, Garrett.

Schooley enjoys woodworking and family in his spare time, and lives by the quote "Always be thankful for your blessings."

TSM Quick Facts

- The TSM program started in 1999
- Enrollment in TSM has increased by 70 students since 2001
- There are over 60 students in the online TSM program
- There were 29 students in the spring 2005 TSM master's program
- The CyberCave had almost 300 students from 15 area high schools this fall

Freeze Frame



Representative Frank Rasche leans over students' shoulders to discuss their work in the CyberCave. The Paducah Area Technology Center is just one of the 15 schools that enjoyed a day in the CyberCave this fall.

Telecommunications Systems Management

Equal education and employment opportunities M/F/D, AA employer