

to the faculty and staff of Mississippi State University

## CREATE to aid classrooms

Student “techno-teams”—middle schoolers proficient in computer applications—are part of a pilot project involving new technical enhancements for the state’s public classrooms.

Coordinated by the Center for Educational and Training Technology at Mississippi State, the project also is using an interactive web site, wireless computers, rolling technology carts, and new curriculum modules to help expand learning opportunities.

Called Challenging Regional Educators to Advance Technology in Education or CREATE, the effort is funded this year by a \$1.5 million United States Department of Education grant. Launched last year with \$1.8 million from the department, the project is a collaboration of the Tupelo Public School District and Mississippi State’s training technology center and the university’s extension service.

In addition to Tupelo, middle schools in Booneville, Houlka and Winona are participating. Expansion to other schools is planned as funding becomes available.

“CREATE for Mississippi’ is a partnership in every sense of the word,” said technology center co-director R. Dan Brook. The pilot project has the potential to reach more than 10,000 students and nearly 700 educators in Northeast Mississippi, he added.

Students and teachers, along with principals, superintendents and school board members, are involved in the project’s planning, in-service training and implementation, Brook said. More than 40 participants were on campus in January for training and planning sessions that included a demonstration from a Tupelo student techno-team.

“The school-selected student teams are

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*Vicksburg mayor Robert Walker (second from right) was guest speaker recently for the Bill Collins Memorial Lecture Series, a monthly program of the Stennis Institute of Government, Congressional and Political Research Center and student John C. Stennis-G.V. “Sonny” Montgomery Association. Welcoming Walker were (from left) association president Ben Needham, institute director Marty Wiseman and center director Mike Ballard.*

## Theses, dissertations have new look, sound

The scholarly works of current and future Mississippi State students completing master’s and doctoral degrees will have a new look—and sound.

Through an electronic service now available at Mitchell Memorial Library, graduate students’ written theses and dissertations may include visual images with sound accompaniment.

MSU is among some 100 libraries converting to the Networked Digital Library of Theses and Dissertations, a consortium launched in 1997 by Virginia Tech University. Clemson, Kentucky, Louisiana State, North Carolina State, Tennessee, and Vanderbilt are other Southern universities also making the transition.

The electronic documents have the capabilities of color diagrams and images, hypertext links, audio, video, and even virtual reality worlds. The process also provides students with a major format to display their skills in digital technologies and publishing.

“This presentation capability allows students not only to discuss concepts, but to show them,” said Dean of Libraries Frances Coleman. “Electronic formats also allow much wider and more immediately available research via the Internet.”

Dr. David Cole, provost and vice president for academic affairs, said the “primary

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# Recreation offered for students with disabilities

A new program that allows individuals with and without disabilities to share physical activities is now under way at MSU.

The Unified Adapted Physical Activity Program is the brainchild of Dr. Daniel Webb, assistant professor in the Department of Health, Physical Education, Recreation and Sport. He established the recreational program with funding from a Schilling Special Teaching grant and assistance from the state Department of Rehabilitation Services.

Webb based MSU's program on the one at Ohio State University where he earned a doctorate. He said his idea for the endeavor began when he joined the university faculty two years ago and saw that many students with disabilities did not participate in any type of organized physical activity. None was available on campus and there are only five or six in the entire country.

"I sat down with the Office of Student Support Services and we devised a survey asking students with disabilities if they would be interested in a recreational program that involved them and able-bodied students. They were very interested," said Webb.

The survey asked for swimming and strength and conditioning programs, and wheelchair basketball will be offered, as well. The Office of Recreational Sports then agreed to make the Joe Frank Sanderson Center available for the weekly sessions.

For the wheelchair basketball games, Webb had to find specially made sport wheelchairs that are much lighter and more maneuverable than normal "street" chairs. Since most students can't plunk out several thousand dollars for the chairs, Webb found a vendor who agreed to sell the university demonstrator chairs at a reduced price.

"We were able to buy 10 chairs for \$6,000, which is a tremendous savings," he said. The chairs are used by both disabled and able-bodied players in wheelchair basketball games.

Some students from Webb's classes will actually participate in the basketball games, while others will volunteer to help with the other activities. Graduate assistant Brandi Childers will work



*Daniel Webb (far right) joins UAPAP participants at the Sanderson Center pool.*

closely with Webb to oversee the program.

Although only eight of 24 physically challenged students volunteered to participate so far, Webb thinks that number will increase as the program

matures.

"In addition to just having fun, the program will help with disabled students' health along with helping students without disabilities to integrate the populations," he said.

## African music celebrated in concert

The music of Africa will be performed Feb. 16 in a special program sponsored by Mississippi State's Percussion Ensemble and Concert Choir.

The university student groups will be joined by Jordan Benissan, a master musician from the West African nation of Togo, for a free 7:30 p.m. public concert at Starkville's St. Joseph Catholic Church.

The accompaniment by Benissan will conclude his weeklong residency in the music education department. While in Starkville, he will present lectures and perform traditional African music to students both at MSU and area public schools.

A part of the music education department's celebration of the national Black History Month observance, Benissan's visit is made possible through a grant from the Mississippi Arts Commission. The University Honors Program and

Lois C. Kaufman Endowment for Music Education at MSU also are sponsors.

The percussion ensemble was founded several years ago by assistant professor Robert J. Damm, a specialist in the African musical heritage. Led by Damm, the members study and perform the polyrhythmic drumming primarily associated with the Ewe-speaking people of the coastal regions of Togo and neighboring Ghana.

The concert choir is directed by associate professor Jeffrey L. Pappas.

St. Joseph's Catholic Church is located at 607 University Drive.

For more information on the concert, telephone 325-3070.

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## msu.NOW!

Check out the university news page by clicking on the "News" button of the university home page [www.msstate.edu](http://www.msstate.edu).

# MSU corporation part of rotorcraft industry

Mississippi State University's Research and Technology Corp. is a new associate member of the Rotorcraft Industry Technology Association.

A Connecticut-based non-profit organization, RITA promotes the interests of American rotorcraft manufacturers. Rotorcraft include helicopters and other vertical take-off and landing—VTOL—craft.

Bell Helicopter Textron Inc., Boeing Helicopters Division and Sikorsky Aircraft Corp. are RITA's principal members. Georgia Institute of Technology, Pennsylvania State University, and the universities of Maryland and Illinois at Chicago are among other associate members.

Established in 1998, the MSU Research

and Technology Corp. facilitates relationships between the university and its industrial affiliates.

"With commercial aviation approaching gridlock and new and larger airports coming with huge price tags, we believe VTOL aviation technology and operations are going to be critical to the U.S. air transportation system this century," said Robert King.

King, an assistant professor of aerospace engineering, said Mississippi State has a history of rotorcraft research. During the 1960s, the university's Raspet Flight Research Laboratory tested a variety of helicopter components. Currently, the laboratory is supporting DuPont Aerospace in developing a

vertical take-off jet.

Other ongoing research projects involve advanced composite material research and testing, computer-controlled manufacturing, aircraft development and flight testing.

"The Raspet Lab has the resources and personnel to play a significant role in research for a new generation of vertical and short take-off aircraft," King said. "Becoming a part of RITA is critical to a successful program."

King said RITA's mission is "to sponsor innovative research to ensure continued superiority of U.S. military rotorcraft while also strengthening the U.S. industry's ability to compete in the global market."

## 'Calliope' will perform in Feb. 18 recital at Giles

The duo "Calliope," formed by flutist Elizabeth McNutt and pianist Shannon Wettstein, will perform a collection of 20th century compositions during a Feb. 18 recital.

The free, public program begins at 3 p.m. in the Bettersworth Auditorium of Giles Hall.

Starkville resident McNutt and Wettstein, an assistant professor at Minnesota's Bemidji State University, will be joined by Andrew May, a lecturer in MSU's Department of Music Education.

In addition to performing compositions written between 1948 and 1998, Calliope will debut "Discipline 5: From Saturn to Alabama: Travels in Outer Space," a piano solo by former MSU faculty member Mark Applebaum.

Other selections include music by young composers Sam Hayden of England and Matthew Schlomowitz of Australia, "Sonata" for flute and piano by Sergei Prokofiev, Franco Donatoni's "Fili," "Four Miniatures" by Brian Ferneyhough, and "Le Merle Noir" by Olivier Messiaen.

For more information, telephone 325-3070.

## Nominations due for FPWA scholarships

Nominations are due soon for two scholarships for women offered by the Faculty and Professional Women's Association.

Two \$500 scholarships will be awarded for the 2001-2002 academic year to one undergraduate woman and one female graduate student. Undergraduate applicants must have a grade-point average of 3.4 or greater; graduate applicants must have a 3.8 or greater GPA.

To apply, submit a letter of application, including intended educational plans, career goals and a statement of need; personal data sheet, resume or vita; transcripts of college courses; three letters of recommendation from MSU faculty or professional staff members, preferably at least one of whom is a member of FPWA; and a financial aid scholarship application.

A copy of application guidelines may be obtained from the Department of Financial Aid and Scholarships in Garner Hall or the FPWA web site [www.msstate.edu/org/FPWA/scholarship.html](http://www.msstate.edu/org/FPWA/scholarship.html).

Materials should be sent on or before April 9 to Kay Fike Jones, chair, FPWA Scholarship Committee, Mail Stop 9512. For more information, telephone 325-7458 or e-mail [jonesk@ur.msstate.edu](mailto:jonesk@ur.msstate.edu).

## Furniture design software distribution expanded

Scientists at the Forest and Wildlife Research Center, in cooperation with the Weyerhaeuser Co., are expanding the distribution of a free software-training program for design and quality-control engineers in the furniture industry.

Developed at the university, the "ChoiceFrame" program models 13 different joints used throughout the industry, according to Bob Tackett, a university research assistant and one of the program's developers.

"A designer can experiment with joints by interchanging different materials or by changing the sizes of the material or fastener sizes and types," Tackett said. "With each change, a corresponding strength prediction for the joint is displayed on the computer screen."

The software is provided at no charge to furniture manufacturers following completion of a training seminar.

# Water quality object of research

Determining how well current forest management practices protect water quality is the goal of a research project by scientists at the Forest and Wildlife Research Center.

Funded, in part, by the federal Environmental Protection Agency, the university study is examining Best Management Practices-BMPs-used on intensively managed loblolly pine plantations to minimize the impacts of forest practices on water quality.

BMPs currently in use include the maintenance of 30-60 foot buffer zones between streams and areas where timber is being harvested, and the diversion away from streams of runoff water from harvested areas and access roads, said principal project investigator Stephen Schoenholtz.

“While BMPs have been used for about 10 years, there have been few scientific assessments to determine their effectiveness in protecting aquatic habitat and preventing non-point source pollution of streams,” he said. “Outcomes of this project will enable forest managers to modify ineffective BMPs and to promote those meeting management goals.”

Schoenholtz, a forest hydrologist in the Forestry Department, and co-investigator Eric Dibble, an aquatic ecologist in the Wildlife and Fisheries Department, are focusing their study on 15 streams in Calhoun, Choctaw and Webster counties.

All flowing through intensive-harvesting areas, streams in the three-year study are being monitored before, during, and after cutting to determine if changes occur in water quality, aquatic habitat and biological communities in the streams.

Specifically, the MSU scientists are examining temperature, oxygen and chemical contents, and other changes in water quality. Assessments also are being made of aquatic habitats and biological communities in the bodies of water. Schoenholtz said monitoring fish and other aquatic life, as well as traditional measurements of water quality, are practical ways to determine BMP effectiveness.

“We are conducting stream habitat assessments and point sampling of water

quality upstream adjacent to areas where timber has not been harvested and downstream from where timber has been harvested and BMPs have been implemented,” he explained.

The research watersheds also will be used as demonstration areas for forestry workshops and for teaching laboratories in forest management and policy, forest hydrology, silviculture, and stream ecology.

“This project will provide a quantitative measure of the effectiveness of BMPs while identifying key BMP characteristics to be considered in future watershed management planning,” Schoenholtz said.

In addition to the EPA, the BMP research is sponsored by Weyerhaeuser Corp., The Timber Co., MSU-based Mississippi Water Resources Research Institute, state Department of Environmental Quality, and National Council of the Paper Industry for Stream and Air Improvement.

## Meeting scheduled about 7-night trip to Germany

Faculty, staff and graduate students are invited to a Feb. 14 meeting to discuss a summer study abroad program in Berlin, Germany.

Offered by the College of Business and Industry, the trip is scheduled for June 9-16 and includes seven nights in Berlin. Cost is \$1,600. The agenda includes walking tours and visits to cultural centers and German companies.

Students may enroll in a three-hour graduate course on managing business in Europe (tuition is extra) that focuses on activities used by small U.S. companies to compete in Europe.

The informational meeting begins at 5 p.m. in 243 McCool Hall. For questions, telephone Barbara Spencer at 325-1891 or e-mail her at [bspencer@cobilan.msstate.edu](mailto:bspencer@cobilan.msstate.edu).

## Have You Met...



**Name:** Jan Shook  
**Birthplace:** Winona  
**Occupation/title:** speech pathologist/augmentative communication specialist for T.K. Martin Center  
**Current home:** Starkville  
**I stay home to watch:** “The Sopranos” and “Crossing Over”  
**The book I’ve been reading:** “Midnight in the Garden of Good and Evil”  
**Favorite pig-out food:** seafood  
**Favorite performer:** Beatles and Led Zeppelin  
**Prized possession:** my dog Pepper  
**The best part of my job is:** working with individuals with disabilities and finding ways around disabilities through technology  
**If I wasn’t in this job, I’d be:** on the beach  
**Words that best describe me:** funloving, caring

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Editor—Kay Fike Jones