

Digital Imaging Initiative Takes Off

Four offices on the University of Mississippi campus are engaged in a digital imaging initiative that promises to change the way they do business.

The Office of Institutional Research, Graduate School, Financial Aid Office, and Provost's Office each have scanning workstations that connect to mini-servers located in the University's Data Center. These mini-servers ultimately connect to the project's main server which houses a very powerful database created by Mobius Management Systems, Inc.

"I'm very excited about this initiative because it will lead to major improvements in the efficiency of administrative processes," says Dr. Maurice Eftink, Associate Provost and Dean of the Graduate School. "We'll be able to share information around campus in new and important ways as paper documents are converted to digital form and linked to related information in the SAP and Campus Management (CM) databases."

Graduate Program Coordinators (GPCs) and department chairs are among the first to see the benefits of digital imaging in the Graduate School.

"We used to photocopy transcripts and physically send them back and forth between the Graduate School and the 50 or so GPCs," notes Eftink. "Now we scan those documents and store them in Mobius, where they'll be available at the click of a mouse for evaluation and admissions decisions."

According to Chris Provence in the Office of Information Technology (IT), making the information appear when the mouse is clicked is more complicated than it seems.

"While powerful, all Mobius does is store the archived material and then allow it to be retrieved," explains Provence. "You need an interface and workflow to actually see and act on the documents."

IT's Jie Tang developed the GPC Web interface and Tim McCready adjusted the workflow to allow coordinators to make recommendations online.

Tools such as these make digital imaging more than just a replacement for your file cabinets, says Laura Diven-Brown, Director of Financial Aid.



Student worker Reshma Patel at the scanning workstation in the Graduate School.

"You can bring information in through other dynamic ways, such as faxes, online applications, and e-mails, or you can store Word or Excel documents in Mobius," asserts Diven-Brown. "It's a whole document management thing where you can bring in all this data and flow it through the people who need to use it."

"The system has good flexibility and room for customization, so there are many things you can do," concurs Provence. "It takes a lot of commitment, and you may have to redesign the

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Caught Someone Cheating?

The Provost's Office is using digital imaging to take the academic discipline process completely online. Paper materials involved in a case can be scanned and uploaded, giving members of the Academic Discipline Committee quick and easy access to the evidence.

To report an academic infraction, visit the Online Services page on the Ole Miss website. If the student in question is enrolled in a class you teach, choose the "Faculty" tab and then the "Class Rolls and Grades" button. The next page will

feature a menu for each of your courses which includes an "Academic Discipline" link you can use to initiate a case.

All other faculty and staff can initiate a case by selecting the "University Employees" tab in Online Services. Click "Tools" to reach the Academic Discipline link. You will need to know the student's identification number in order to proceed.

For questions, contact Dr. Tim Hall in the Provost's Office at 915-5317 or lwHall@olemiss.edu.

Applying for Scholarships Just Got Easier

With the addition of a new consolidated scholarship application in Online Services, prospective students will find that applying to Ole Miss truly is one-stop shopping.

“Now all the applications they need, admissions, scholarships, housing and orientation, are in one place,” explains Erin Findley, Assistant Director of Admissions for Communications. “This means students don’t have to visit a lot of different web-sites and enter the same information several times over.”

When a student completes the application for admission and elects to open the scholarship application, the personal information just entered is pulled up on the new form.

“At that point, the student only has to answer supplemental questions,” notes Laura Diven-Brown, Director of Financial Aid. “Once submitted, their application remains in a pending area until they’re admitted, and then a PDF is created and stored in the Mobius digital imaging database.” (See related article on page 1.)

Not all students applying for admission may be ready to apply for scholarships. Normally, a student would then have to wait until being admitted and receiving their WebID in order to go back into the system and access the application.

“We didn’t want students to have to wait that long,” says Diven-Brown, “but this required creating another unique identifier for the student. It couldn’t be their social security number, so we decided to use the admission application number. This lets the student get back to their application at a later date, and if they’ve forgotten that number, we even have a web lookup to help them.”

Before the student is admitted, they can return to the application and modify the information on it. Once admission occurs and the application has been stored as a PDF, they can re-submit the application three more times if needed.

“This really benefits the student, because so many of them apply before receiving their final class rankings, honors, and awards, or before taking the ACT or SAT late in their senior year,” explains Marea Herrington, Assistant Director of Financial Aid.

Students can also attach resumes and include personal statements with their application.

“Scholarships can impact whether a student goes to college or not, or attends Ole Miss or not,” states Diven-Brown. “It’s important we provide those awarding scholarships with the most complete information possible about the applicants and their accomplishments.”

The new scholarship application may seem simple to students, but creating it wasn’t.

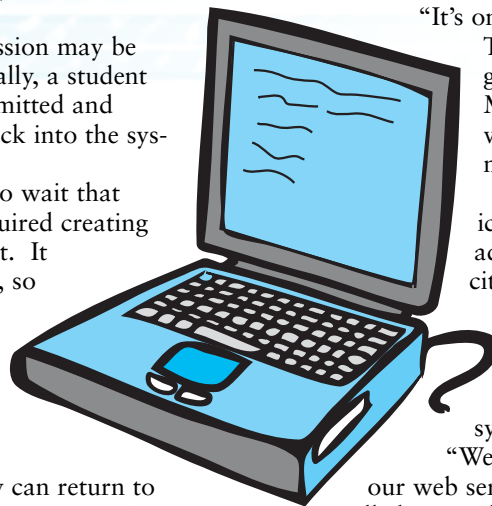
“Veena Mantena in the Office of Information Technology deserves a lot of credit for her work on this,” says Diven-Brown.

“It’s one of the most complex projects we’ve ever done.

There were lots of details and it had to be integrated with other systems like Campus Management and Mobius. But now we have a very powerful, flexible system that lets us do so much more than we could before.”

Diven-Brown points out that the online services now offered by Financial Aid are fairly advanced compared to other universities. She cites recognition of the department’s efforts on the web at the National Association of Sigma Users (NASU) Conference held in Colorado Springs in July. Sigma is the maker of ProSAM, the software used in the Financial Aid system.

“We were one of five schools giving presentations on our web services, and NASU decided to make a contest of it called ‘Best of the Web,’” explains Diven-Brown. “We ended up winning against competitors like Ohio State, Michigan State, and the University of California at Berkeley.”



Cool Tech

Microsoft Producer is Free and Easy

By **Wayne Shaw** in the College of Liberal Arts

Before recently attending a Microsoft Productivity workshop, I had never heard of Microsoft Producer for Office PowerPoint 2003. When I saw the demonstration of the product, I was quite impressed. I was even more impressed when the presenter said it was a free download.

Producer lets you capture or import a variety of media, including video, audio, and web pages, and then synchronize those and other elements, such as animation, in a PowerPoint presentation.

As the presenter showed the various features in Producer, I realized this is a wonderful tool that could be utilized by anyone on campus. Students could use it to

create multimedia presentations for class, and faculty could use it to produce electronic tutorials to upload to Blackboard.

In my role as a computer consultant for the College of Liberal Arts, I envisioned using Producer to create short how-to videos. When I returned to my office after the presentation, I downloaded it from the Microsoft website and installed it on my laptop. In a matter of minutes, I used Producer to create a how-to video explaining the procedure of changing the grading scale of a course to “audit scale” in SAP.

For more information or to download Producer, visit www.microsoft.com/producer.

For Chip Wade

Science Cometh Before the Fall

Have you ever slipped and taken one of those embarrassing falls out in public? At the time, you may not have thought of the science involved. But Dr. Chip Wade does.

Wade, a former strength coach and professional baseball player, recently joined the faculty of the Health, Exercise Science, and Recreation Management Department in the School of Applied Sciences.

"I guess you could say I've worked my way around the Southeast Conference," grins Wade, who got his bachelor's degree from Georgia, master's in Florida, and Ph.D. from Auburn.

In addition to being an assistant professor in exercise science, Wade is also director of the new Applied Biomechanics and Ergonomics Laboratory (ABEL) being constructed in the Turner Center.

The lab consists of a large elevated floor area surrounded by six infrared cameras and two real time digital cameras that can capture movement

at up to 1000 frames per second (standard video is 30 frames per second). Subjects wearing 70 or more reflective markers strategically located on their bodies can be recorded as they walk, run, or move in any way. Special plates in the floor measure the force exerted by the person as they step.

A nearby computer loaded with specialized software takes the information gathered by the cameras and plates and displays a real time video image, 3-D graphic model, and charts and graphs representing the subject's movement.

"In this lab we can research whole body dynamics," explains Wade. "How people move, what causes their movements, what causes them to fall, and how they can recover in a way that reduces injury when they fall."

Wade, whose specialty is human postural control and ergonomics, is particularly interested in fall prevention in the aging population.

"An older person may be in good health," observes Wade, "but if they take a bad fall, then their lifestyle often goes from active to seden-

tary, and there can be a big impact on their health."

Physical characteristics such as body mass and conditions like visual-related macular degeneration or cognitive disorders can increase a person's likelihood to fall.

"We're starting to realize that strength has a lot to do with why people fall, particularly when they slip," notes Wade. "In the aging population, we've been able to measure that lower extremity strength has a significant impact on slips and possible recovery. An individual who has poor lower body strength may be at greater risk for a fall-related injury."

Such knowledge can be used in community-based education and implementing strength protocol training with the elderly. However, factors beyond body condition can increase the risk of falls as well.

"Flooring, lighting, footwear, different things like that can have an impact," says Wade. "We can look at ways to make conditions safer for the aging population. It may be as simple as changing the texture of the floor so they feel it as they walk."

According to Dean Linda Chitwood of the School of Applied Sciences, the research capabilities of the new lab are perfect for multi-disciplinary studies.

"Dr. Wade's background will help us develop research teams to address a variety of injury prevention and health-related issues," she comments. "The infrared technology lends itself to collaborative research in fields ranging from bioengineering to ergonomics, behavioral and social sciences, public health, pharmacetics, and clinical medicine."

"Dr. Allison Ford and I have begun preliminary work on studying how osteoporosis can affect people's falls," reports Wade. "We have proposed doing dexascans on a group to get body and bone density measurements, and then we'll bring them into the lab to look at gait characteristics and movement dynamics."

Two other studies planned for the lab focus on workplace ergonomics.

"Railroad work is one of the most highly litigated occupations today," explains Wade. "I have a couple of grants to look at what happens when people walk across ballasts, the rocks that are under the tracks. We'll actually put the same type of rocks down in the lab and have subjects walk over them."

Wade is also hoping to obtain funding to study how the deterioration of safety eyewear may increase the risk of falls in industrial settings.

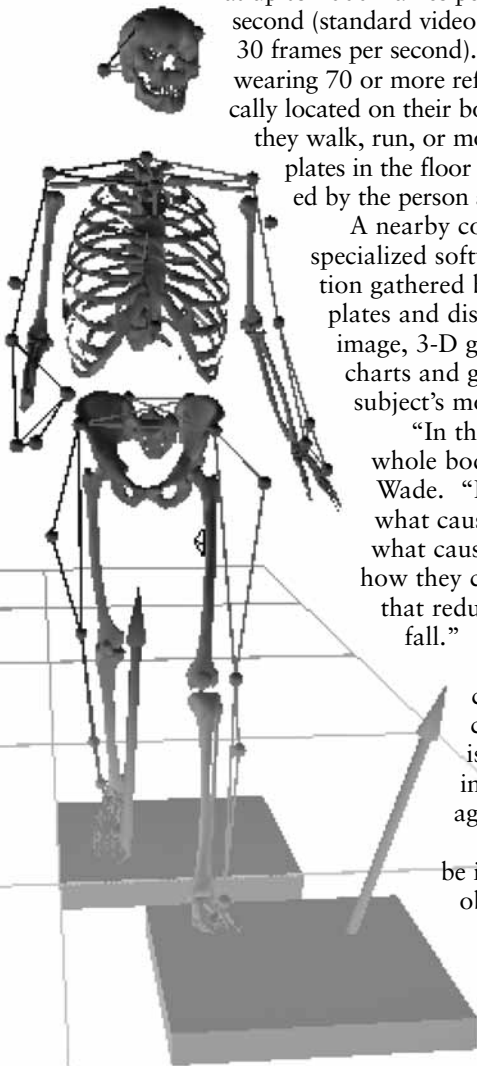
Like the research conducted there, the lab itself is the result of a collaborative effort.

"The department, school, Provost's Office, and Office of Research have all contributed to the development of ABEL," Wade says.

"This lab is the first of its kind at Ole Miss," notes Chitwood, "and with it we expect wonderful advances in research and education within our exercise science program."



Dr. Chip Wade



EDUCAUSE Features Ole Miss Website

Beginning Monday, November 7, the EDUCAUSE website will feature the University of Mississippi as "Site of the Week" on its community page (www.educause.edu/community).

EDUCAUSE (<http://www.educause.edu/>) is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology. The current membership comprises more than 2,000 colleges, universities, and educational organizations, including 200 corporations, with 15,000 active members.

In notifying the University that its website had been selected, Joan Couse, Member Programs Associate with EDUCAUSE, wrote "while this is not an award, we do attempt to showcase sites that are well-designed, visually appealing, and easy to use."

"I think this is a huge honor," says Wendy Carmean, Director of Marketing for the Ole Miss Alumni Association and member of the University's Web Planning Committee. "There are thousands of wonderful websites out there

and for us to be in the top tier is a great accomplishment."

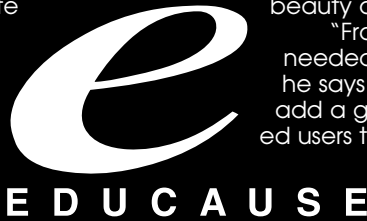
According to Carmean, the development and design of the current website was a team effort.

"The Web Planning Committee consists of diverse representatives from every area of the University," she notes. "We worked with the Office of Information Technology and University Publications to develop a site that is aesthetically pleasing, easy to navigate, and filled with helpful information for a wide range of visitors."

For Robby Seitz, the University Webmaster, the real beauty of the website is its flexibility.

"From day to day, we can refine the design as needed and respond to special circumstances," he says. "After Hurricane Katrina, we were able to add a graphic link to our home page that connected users to helpful resources on campus and in the community."

For more on the UM website, visit www.olemiss.edu/depts/it/webproject.



SAP Donation Helps Students Affected by Katrina

When Allie McBee first learned a hurricane named Katrina was approaching the United States Gulf Coast, she had no idea how it would impact her family.

"I was visiting my grandmother," recalls McBee, a senior sociology major. "We were watching the news, but we just didn't think it would be this bad. It kind of sneaked up on us."

McBee's home in Covington, Louisiana, on the north shore of Lake Pontchartrain, was badly damaged by the high winds of the hurricane.

"My mom's a single parent," she says, "and she was there alone for almost three weeks without electricity."

McBee is one of 240 students affected by Hurricane Katrina who to date have received a laptop donated by SAP, maker of the Campus Management software used by the University of Mississippi.

"I didn't really know much about SAP," McBee admits, "but for them to make this donation is a wonderful thing. It's helping a lot of people, and I'm just very thankful."

Assistant Registrar Max Miller chaired the committee that reviewed students' applications for the laptops.

"Story after story recounted the horrific impact of this devastating storm," Miller notes. "So many of these students have expressed great appreciation for SAP's help at such a challenging time in their lives."

For Miller, the impact of the donation came into focus as he worked with a student whose family had bought a house in Pass Christian, Mississippi, and was moving there from New Orleans when Katrina hit.

"When the storm passed, he no longer had a home address," Miller relates. "It was a very humbling experience for me. It made me realize how this gift went beyond the material value of



Allie McBee picks up her SAP-donated laptop from Ron Savell and Clay Pounds (l-r) at the Information Technology HelpDesk in Weir Hall.

the computers, though they are much-needed for schoolwork and communication. Just to have someone think of these students and their families and offer a helping hand was the real value of this program."

For Eric Stine, Senior Account Executive with SAP Public Services, the donation is in keeping with the company's ongoing relationship with the Ole Miss community.

"Our commitment to higher education extends beyond the partnerships with our university clients and into the connections we form with the people they serve and the broader community of academia," comments Stine. "We are passionate about a high quality education being available to all and realize how important technology tools are in making that vision a reality."

Clickers Keep Classes Interactive

Walk into Shoemaker 303 during the first few minutes of Biology 102, and you might think there's a TV around as students eagerly point devices resembling remote controls toward the front of the room.

Rather than surfing channels, though, these students are taking a quiz.

The instructor, Dr. Tamar Goulet, projects a question and series of possible answers onto a large screen from her laptop. The students use the devices, which are infrared wireless transmitters called "clickers," to select their answers and transmit them to receivers mounted on the wall.

The information is relayed back to Goulet's laptop, and boxes on the screen with numbers corresponding to each student's clicker change colors as the answers are recorded. When the allowed time expires, the students get instant feedback as Dr. Goulet displays a histogram showing how many participants selected each answer and which one was correct.

"I give three-question quizzes every class," says Goulet. "With over 100 students, if I tried to do that with Scantron sheets, it would take a lot of time, involve a lot of work, and use a lot of paper. With the clickers, I can give quizzes without killing myself or a lot of trees."

Though she started with a different clicker company last year, Goulet now uses the InterWrite PRS (Personal Response System) from GTCO CalComp, and she's pleased with the product.

"The clickers are durable, and the software has lots of options and pretty good tech support," she notes. "The students' PRS grades are calculated automatically, and you can easily load them into Excel or Blackboard if you want."

The students' responses to the quiz provide a record of attendance. The clickers can also be used for polls, contests, debates, and longer exams.

"I can make the responses anonymous, and this allows me to ask about controversial issues, like stem cell research or genetic testing," Goulet explains. "I can get a measure of how the students really feel and design the class accordingly. If it's a 50-50 split, we can have a debate. If there's an overwhelming majority in one direction, I can prod them to explain their opinions a bit."

Goulet has other ideas for the clickers that she's yet to implement.

"At the end of a section, I could put in a question, for credit or not, that lets me see if the students understood the material," she notes. "That's the kind of feedback you don't usually get until an exam, when it's too late to go back and re-teach the subject."

But the greatest advantage Goulet sees in the clickers is the interactive component.

"I enjoy lecturing, but there's only so much jumping around I can do, and even then the students are just sitting

there taking notes," she says. "These are kids of the cell phone and iPod age, so this gets them involved in the class."

Christine Haynes, a freshman pre-nursing major from Jackson, agrees.

"I think the clickers are great," she comments. "They're easy to use, and taking quizzes every class helps you keep up with the material so you don't fall behind."

But for George Ball, a freshman psychology major also from Jackson, there are pitfalls.

"I feel it's way too easy to cheat," he asserts. "You hold it up to transmit your answer, and the people around you can see what you're doing. Everything seems to be technological now, but I want to have the paper in my hand and turn it into the teacher."

"In a large class like this the clickers are a good way to give quizzes," notes Aeryal Herrod, a junior in elementary education from

Grenada. "You just have to make sure your answer is registered by the system."

Goulet concurs that, while the clickers are useful with any size group, they are particularly suited for addressing large class dynamics.

"People are afraid to raise their hands, and when you ask a question, the same people usually answer," describes Goulet. "This gets everyone involved, even the shy students."

Goulet required her students to purchase a clicker, which retails for about \$30. If they purchased a new textbook, however, it included a \$20 rebate for the clicker.

"Because of the number of students purchasing clickers for our classes, InterWrite installed the receivers for free," says Goulet. "You just download the software, and it's free as well."

With assistance from the Faculty Technology Development Center, Goulet configured her class registration in Blackboard so students could register their clicker identification numbers at the same time.

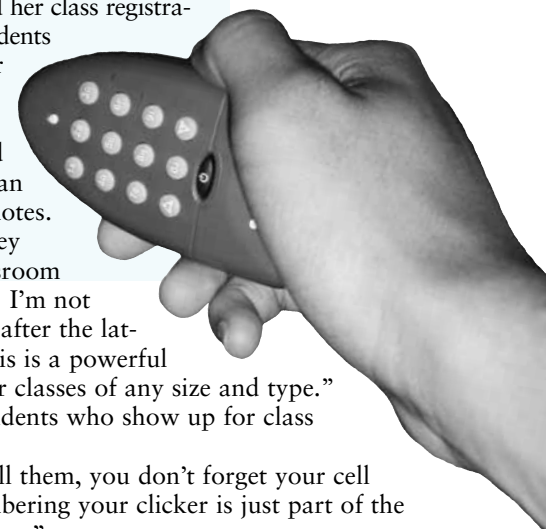
"Departments could purchase clickers and loan them to students," she notes. "They're reusable, so they would work in any classroom that has the technology. I'm not someone who has to go after the latest gizmo, but I think this is a powerful tool that can do a lot for classes of any size and type."

And what about students who show up for class without their clickers?

Goulet laughs, "I tell them, you don't forget your cell phone, do you? Remembering your clicker is just part of the responsibilities of the class."



And the answer is...:
With clickers in hand, students
respond to a quiz.



10,000 and Still Counting

Whit Hubbard may not have realized it, but his request to have a TV and VCR delivered to Hume 106 on October 24 for a 10:00 a.m. class was a major milestone for the Office of Information Technology's Multimedia Service.

Hubbard's was the 10,000th faculty or staff request for equipment since IT Media, as it is commonly called, began operating at the start of spring semester 2001. An adjunct instructor in the English Department, Hubbard requested the equipment to show Woody Allen's film, *Deconstructing Harry*, for 101 English Composition.

IT Media employs nine student workers, including Gerald



Williams and Sufian Ahmad (shown here l-r), who coordinate deliveries across campus as part of this free service. For more information or to make a request, visit www.olemiss.edu/itmedia.

Digital Imaging *continued from front cover*

way you work, but if a department looks at the big picture from the beginning and thinks about how they could best use this technology, then the possibilities are pretty much limitless."

Provence notes there are complexities involved in using Mobius.

"Retrieval is more challenging than storage," he explains. "You have to think about how you want to find a document when it goes into the archive, so you can assign the proper index values. Because once something is archived, you can't change the file or its index values. This maintains the integrity

of the item, which is good, but you have to delete and re-enter it if you want to alter the information it contains."

Such characteristics haven't dampened Diven-Brown's enthusiasm.

"We've only hit the tip of the iceberg with digital imaging," she states. "I think it has widespread appeal and applicability for so many departments. It's certainly a great way to enhance CM's capabilities. I've got all kinds of ideas for how we're going to use it in Financial Aid. It's just a great thing for our office and for the University as a whole."

New 'Lifts' and 'Checks' in Priority Registration

Two new features are enabled for the online priority registration, which runs from October 21 to November 25.

Advisors can now lift advising holds directly through a new Web interface. Holds are put in place to prompt students to visit their advisors before registering. In the past, after a student's visit, the advisor would have to notify the department or school in order to get the hold lifted.

Co-requisite checking is also turned on for the first time during priority registration. Previously, a student registering

for a course with a co-requisite would get a warning to register for both. Now registration will be stopped if the student has not signed up for the co-requisite as well.

On a related note, pre-requisite checking will still just issue warnings to students during priority registration, but this feature will also go live at the end of November when the initial phase of the Transfer Equivalency Resources (TERS) project is completed.

The TERS calendar is at www.olemiss.edu/depts/it/ters.

www.olemiss.edu/technews

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