Travelers near the Goldsworth Valley Pond on a recent afternoon reflected in the water. Their images were reflected almost like statues, as the two birds looked like resident swan, but also for Technology in Business as part of a three classes for the first time this semester. The goal is to make students more aware of the need for cooperation between engineers and business staffs when developing and manufacturing a product.

"We want to show students that activities within an organization do not happen in isolation," says Robert Landeros, management, who is directing the project. "Decisions made in one department of a company affect the decisions and activities in other departments. By using a computer simulation, students will experience a more authentic business situation that would not be possible through lectures or case studies."

The simulation is being funded by a $19,920 grant from the National Consortium for Technology in Business as part of a national initiative to integrate college courses in business and engineering.

Landeros is using the simulation in his materials management strategy class. The other business class involved is one in purchasing management taught by Robert F. Reck, marketing. In addition, students from a quality assurance and control class led by David M. Lyth, industrial engineering, are participating in the simulation. Liwaa S. Bringelson, industrial engineering, also is part of the simulation team.

The organizers have created 15 teams by integrating students from each of the three classes. The simulation is designed as homework to be completed outside of class. It will account for 25 percent of each student's grade. There also are three faculty teams participating in the simulation this semester.

The computer model is based on information furnished to WMU by the Durametall Corp. of Kalamazoo, a leading manufacturer of mechanical sealing systems. Company officials provided data on an absolute product line regarding market demand, product design, raw material requirements, and production planning and control. The 18 "companies" are manufacturing "slingers," which serve as seals for pumps. The parts come in 20 different sizes and can be made of three different materials.

The students have been furnished with a hard copy of a reference manual on the product as well as information on the computer that will impact their work. They must make such decisions as those they will manufacture, how they will manufacture it, how much they will manufacture and whether or not they will periodically upgrade their facilities. The bottom line decision they must make is how they will compete on price, quality, or delivery.

Each week, the students must sit down in a business engineering computer lab with their teammates and make decisions. They then turn in a disk to their instructor. The data on the collected disks is used to run a program. Two days later, the students receive results of their actions and the decisions of other teams in the form of reports on market demand, market share and financial performance.

During the course of the semester, the students will make 12 sets of decisions, simulating the 12 months of a company's fiscal year.

"The program is designed so that every decision will impact another decision, which emulates the real world," Lyth says. "For example, you have to order raw materials in order to manufacture more product. You have to think about lead time and production planning."

The simulation team developed the software for the program over the past year with the help of three graduate students and one undergraduate. Lyth gave the program a dry run this spring in a class he taught at WMU's Grand Rapids Center.

Two problems were identified and corrected: the user manual was rewritten to be more user-friendly; and the logic was changed to place less emphasis on price and more on quality and delivery.

The faculty members say that the reaction has been positive. "My students are looking at the simulation as a great opportunity to have an educational experience that mirrors what industry expects out of them," Lyth says.

According to Bringelson, the students have been surveyed on their expectations of teamwork. They will be surveyed again at the end of the semester to see if their expectations were met.

"I think the students will find it challenging when they have to put self-interest for the year.

What does a longtime WMU administrator do for an encore with retirement not far away? He immediately takes on the tough task of helping to raise funds to assist persons in need in the Kalamazoo community.

Chauncey J. Brinn, most recently WMU's vice president for administrative affairs, will retire July 1, 1994. But until then, Brinn will maintain a busy schedule, beginning with his appointment as WMU's liaison executive to the Greater Kalamazoo United Way's 1993 campaign until its Nov. 11 victory celebration.

Brinn, a WMU administrator since 1968, is one of 11 employees from area companies or organizations who are volunteering their time to the campaign. And as someone who briefly served as WMU's interim director of intercollegiate athletics, he knows the importance of teamwork in helping the United Way achieve its goal of raising $6 million this year.

"The teamwork concept is extremely important," he says. "All the liaison executives work together to help companies deliver to their employees the important message of helping the community through donations. We are highly motivated and determined to do everything we can to make the United Way campaign a huge success."

While the United Way campaign officially began Sept. 6, Brinn and other liaison executives have been working virtually nonstop since Aug. 2 when the drive's Pacesetter operation got under way. Under Pacesetter, various area companies were selected to conduct their campaigns before the regular United Way campaign began to set the tempo for the year.

Brinn served as a liaison executive to the Upland Group during that segment of the campaign. He made numerous visits to Upland, working with the United Way on-site coordinator to determine the company's needs for its fund-raising drive.

Earlier in the summer, the executives went through intensive, day-long training sessions. During their training, they visited WMU agencies and support centers to become familiar with them.

Brinn's daily schedule—these days is sometimes grueling, but rewarding. A typical work day for him often begins at 6 a.m. He usually arranges various area companies before employees get to work to prepare for meetings with employee groups, which may extend through the day. When Brinn isn't talking to employees about the United Way, he's on the road, distributing materials and films about people who are helped by the campaign.

As of Oct. 26, a total of $396,262 had been collected in the campus United Way drive. That's 65 percent of this year's goal of $600,000. Although the campaign officially begins Friday, Oct. 29, contributions will continue to be accepted after that date.

(Continued on page four)
Researchers developing device to assist blind children

The project will focus on two mobility skills that Guth says are "of fundamental importance to children who are blind." He points out that nearly all pedestrian paths are essentially a chain of straight-line segments and turns and that the inability to walk in a straight line or make accurate turns can lead to inconvenience or danger. "If you are sighted," he says, "you probably take your ability to do these things for granted because vision allows the easy and precise control of locomotion. For persons without access to visual feedback, he says, audio feedback frequently provides similar control of locomotion. For example, it is used for guidance when a blind pedestrian walks along a busy street or along a wall from which is reflected. Many everyday tasks such as walking straight across a quiet street without veering into the intersection or navigating along a parking lot without turning in the wrong direction can be daunting, however, because there may be few audio clues to provide guidance.

"Although there is a lot of research showing that it is difficult to walk in a straight line or to make accurate turns without vision," Guth says, "we don't know about what can be done about this."

To help blind children to improve both skill and confidence, the WMU researchers plan to market a feedback device that will be carried in a "fanny pack." The device will be equipped with electronic sensors that detect changes in direction when the wearers veer off a straight-line trajectory and will alert the wearer that an unintended change in direction has taken place. The sensor also will be useful for providing feedback to wearers as they practice making turns. Any turn made over or under the number of degrees desired will result in an audio signal.

"It is a situation in which we can apply some recent technology to an interesting and longstanding problem," Gesink says of the microcomputing technology that will be used in the device. "The challenge is to make this simple enough for a young child to operate. We're looking at the use of synthesized voice feedback and limited numbers of buttons and controls.

During the one-year project, the team will build and refine a prototype device, assemble and conduct laboratory testing on at least five devices based on the original prototype; and test the devices with blind children in four school districts.

The sensor packs will be assembled and tested in WMU's Department of Electrical Engineering laboratories and at Speciality Electronics Inc., an East Lansing research and development firm.

The research team hopes that after initial training sessions with a mobility teacher, children age 6 and older will be able to use the system by themselves to practice their mobility skills. Guth and Gesink predict that children will find the device, which will be lightweight and easy to use, both fun and satisfying.


NEW EQUIPMENT INSTALLED — The full line of aerobic and weight equipment recently installed in the new Student Recreation Center is getting its own workout from eager patrons. An 8,000-square-foot fitness room features variable resistance machines, stair climbers, rowing machines, electronic bikes, wind resistance bikes, cross country ski machines and free weights. Hours for the building are 8 a.m. to 10 p.m. Mondays through Fridays, 10 a.m. to 5 p.m. Saturdays and 1 to 10 p.m. Sundays. Faculty and staff wishing to use the facility must pay a user fee and have one of the new University ID cards.

Author and illustrator to speak here Nov. 5 as part of Children's Book Week conference

Patricia Polacco, children's book author and illustrator with offices to West Michigan, will speak on "Growing Up in a Multicultural World" Friday, Nov. 5, in the Bernhard Center.

She will speak at 10 a.m. and 2 p.m. during the conference for librarians, teachers, parents, students and the public celebrating Children's Book Week. Registration begins at 9 a.m.

On Thursday, Nov. 4, the public is invited to reception for Polacco from 7 to 8:30 p.m. in Children's Room of Kalamazoo Public Library. Families with children over the age of 4 are invited to a "family time."

Polacco, who has been living in Lansing and grew up in Union City, is known for such books as "Menter," "ThunderCake," "Some Bitter Things," "Quilt." Her newest books are "Bububasu Baba Yoga" and "The Bee Free," both published this year by Philomel. She currently resides in Oakland, Calif.

Polacco's work has been widely recognized. In 1988 and 1990, her work earned first place picture-book awards from the Association of Jewish Librarians, the International Association of Librarians and the Romance League of Michigan. She also earned a place in the new Social Responsibility for books concerning multicultural issues in 1992.

She is also a member of the former Soviet Union as a participant in the Citizen's Exchange Program for writers and illustrators. In 1989, she was invited to take part in the USSR/U.S. Child Initiative Program.

Western News
Nigerian sculptor in residence through November

Nigerian sculptor Lamidi Fakeye will be in residence at WMU through the end of November and will present lectures and demonstrations on his work in classes and in public programs.

Fakeye, a traditional wood carver, has been a senior artist-in-residence in the Department of Fine Arts at Obafemi Awolowo University in Ile-Ife, Nigeria. He first visited WMU in 1963 and has returned several times since then as an artist-in-residence and a visiting lecturer.

Fakeye will be in residence through November. He will give a lecture/demonstration on his sculpture in the Light Fine Arts Building at 3:30 p.m. Tuesday, Nov. 23.

Many of Fakeye's sculptures are figures of the Yoruba people, who number 15 million and are the largest ethnic group in west ern Nigeria. He also has carved such pieces as door panels for the Kennedy Center in Washington, D.C. He has toured the United States to lecture about his work and has been an artist-in-residence at the Art Institute of Chicago, the High Museum in Atlanta and the Cleveland Museum of Art.

His residency at WMU is being sponsored by the Office of International Affairs.

Jobs

The following list of vacancies is currently being posted through the Job Opportunity Program by employment services in the Department of Human Resources. Interested benefits-eligible employees should submit a job opportunity transfer application or sign the appropriate bid sheet during the posting period.

(5) 10, 15, 20 and 25 years of service to the University

25 years — George R. Kohnman, University computing services.

20 years — Janny Lukutz, WMU apartments; and Klaudia A. Welch, industrial engineering.

15 years — Lori E. Baird, chemistry; Mitchell P. Beare, Bernhard Center; and Diane C. Campbell, logistical services.

10 years — Joyce A. Gregg, Valley I dining service; Nancy L. Kahlh, Henry/ Hoekje/Bigelow dining service; Susan E. T. Lasenby, minority affairs; Emma J. Patterson, physical plant-building custodial and support services; Karen L. Rice, sociology; Robert R. Van Dyke, Davis dining service; and Lonnie Wesseling, physical plant-building custodial support services.

(5) Replacement

WMU is an EO/AA employer.

Service

These employees are recognized for five, 10, 15, 20 and 25 years of service to the University.

On campus

DEDICATION DELIVERS — When Kenny Bizzell began working at the University four and a half years ago as a custodian, he applied the same thoroughness to cleaning his area in the Seibert Administration Building as he did to finding out about someone who caught his eye in one of the offices there. His dedication worked on both counts — he's been promoted to supervisor in building custodial and support services and he's engaged to marry Jacquelyn E. Campbell, an auditor in the registrar's office, on June 18. Bizzell is responsible for supervising the 12 custodians who clean the Valley I and III residence hall complexes. His job is to maintain a healthy, clean and safe environment for the residents. He enjoys handling the variety of his job and working with his staff. "It's nice to have a staff you can respect and they respect you," he says. "Therefore, we all get along." Bizzell worked in other management positions before joining the WMU staff, including managing the East Towne Theatre. He attended Kalamazoo Valley Community College and earned a certificate in accounting from Davenport College.

Human resources

Cost-saving mummy coupons available

Active employees and retirees insured under the University hospital-medical-plan administered by the John Hancock Co. must have a routine care mammogram at a reduced cost by using a mammography coupon. The coupons have been made available free of charge by joint cooperation of Kalamazoo Radiology, the Department of Human Resources and the Southwest Michigan Healthcare Coalition. They reduce the cost to $80 with coupon for mammograms that normally cost between $100 and $125.

Coupons are available only to benefits-eligible faculty, staff, retirees and dependents insured under the University plan, and are not applicable to persons insured under an HMO (Blue Care Network or Physicians Health Plan), or retirees and dependents insured under Medicare.

To obtain a coupon, you should visit or call the benefits office, 1310 Seibert Administration Building, 7-3630. In order to have a mammogram, you must have a referral order from your physician. Once you have a referral slip, you should call Kalamazoo Radiology at 381-2911 for an appointment.

(1) The 90-minute program from Aug. 6 features admissions officer, parents and learners. Information on programming available offsite.

Media

The videocassette of "Use It National Teleconference" is now available for loan from the University film/videotape library. This 90-minute program from August features educators, policy makers, telecommunications service providers, parents and learners addressing the role of telecommunications in supporting systemic education change and achieving the National Education Goals.

"Schizophrenia: The Individual and Society," a new program from the PBS Mind/Body connection series, has been added to the University film/videotape library. This 90-minute videotape features a national panel of experts providing the latest medical and scientific information on the etiology, biologica basis and pharmacological treatments of schizophrenia.

To arrange for a loan or playback of these new programs, contact the Media Resource Center in Seibert Hall at 7-5070. For additional information on programming available offsite, call Seibert, L. Wick at 7-5000.

(9) 10, 15, 20 and 25 years of service to the University

90 minutes - Lon E. Baird, chemistry; Adrian C. Edwards, finance and communications; and Stephen C. Seibert, registrar's office.

(5) Replacement

WMU is an EO/AA employer.

Fact File

Bachelor's Degrees Awarded by College

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Source: Office of the Registrar
Thurday, October 28

(56x278) Exhibition, paintings and media by Linda Hartman, WMU Department of Art and Design, 1204 Seiber Administration Building, 8 a.m.-noon and 1-5 p.m.

(70x1124) Paintings, and calligraphy by Linda Hartman, WMU Department of Art and Design, 1204 Seiber Administration Building, 8 a.m.-noon and 1-5 p.m.

(97x1150) Exhibition, paintings and media by Linda Hartman, WMU Department of Art and Design, 1204 Seiber Administration Building, 8 a.m.-noon and 1-5 p.m.

(111x1178) Calligraphy by Linda Hartman, WMU Department of Art and Design, 1204 Seiber Administration Building, 8 a.m.-noon and 1-5 p.m.

(129x1204) Exhibition, paintings and media by Linda Hartman, WMU Department of Art and Design, 1204 Seiber Administration Building, 8 a.m.-noon and 1-5 p.m.

(142x1232) Calligraphy by Linda Hartman, WMU Department of Art and Design, 1204 Seiber Administration Building, 8 a.m.-noon and 1-5 p.m.

Friday, October 29

(115x222) Lecture in connection with the opening of the Carol Ann Haenicke Collection of American Women's Poetry, Suzanne Jahan, expert in women's poetry from the University of Colorado, Sangren Honors Lounge, 3 p.m.

(136x350) Mathematics and statistics colloquium, "Forcing Concepts in Graph Theory," Frank Harary, Mathematics and Statistics Department, noon, room 601, first floor, Ellsworth Hall, 3 p.m.; advance registration required by calling 7-7275.

(156x478) Lecture in connection with the opening of the Carol Ann Haenicke Collection of American Women's Poetry, Suzanne Jahan, expert in women's poetry from the University of Colorado, Sangren Honors Lounge, 3 p.m.

(176x606) Mathematics and statistics colloquium, "Forcing Concepts in Graph Theory," Frank Harary, Mathematics and Statistics Department, noon, room 601, first floor, Ellsworth Hall, 3 p.m.; advance registration required by calling 7-7275.

(196x734) Lecture in connection with the opening of the Carol Ann Haenicke Collection of American Women's Poetry, Suzanne Jahan, expert in women's poetry from the University of Colorado, Sangren Honors Lounge, 3 p.m.

(216x862) Mathematics and statistics colloquium, "Forcing Concepts in Graph Theory," Frank Harary, Mathematics and Statistics Department, noon, room 601, first floor, Ellsworth Hall, 3 p.m.; advance registration required by calling 7-7275.

Saturday, October 30

(219x990) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(239x1118) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(259x1246) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(279x1374) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(299x1502) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(319x1630) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(339x1758) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.

(359x1886) Computer science and mathematics and statistics colloquium, "Coloring Graphs with Neural Networks," Kenneth J. Danhof, professor of computer science, Southern Illinois University, 4 p.m., room 2090 Friedmann Hall.