The computer's smallest component: Programming Consultant Lynn Saadocex examines a plug-in module, one of thousands needed by the 6,500. (See story, page 3). - Photo by Bill Mitchell

Computer can help redesign curricula

By GAIL MORRIS
Assistant Editor, News Bureau

Administrators in two MSU colleges view curriculum management by computer as a way to improve communication within the community, and to meet changing needs and interests among faculty and students.

Using computer programs developed by John F. Vinsonhaler, associate professor of education, a prototype computer-based management information system for curriculum control has been designed for use here.

It is known as UDEANS - University Deans' Information System - and its function on the University's CDC 3600 computer.

Developed and now in use in the School of Social Work, College of Social Science, UDEANS will soon be implemented in the College of Communication Arts by Dean Jack Bain, Assistant Dean Erwin Bettinhaus, and Clyde D. Morris, assistant professor of communication.

In a report recently issued by the University's Information Systems Laboratory (ISL), the men who developed UDEANS describe its use and potentials for curriculum improvement.

Developmental work was done during 1968-69 under the direction of Vinsonhaler, who heads ISL, in cooperation with Clarence L. Winder, dean of the College of Social Science; Morris; and Daniel Millin, an ISL computer specialist.

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"THIS PROJECT," says Morris, "is a good example of what can be accomplished when researchers from different areas of the University work cooperatively with administrators and students in solving an educational problem."

The ISL report says: "The modern college and university curriculum is like Mark Twain's weather: 'Everybody complains about it, but nobody does anything.'"

"Conservative administrators, radical students and neutral faculty all agree on the need for revision, be it modest or drastic. The problem is in reaching agreement on improvements in the curriculum."

UDEANS provides the lines of communication necessary to continually adapt the curriculum to changing student and faculty needs.

The system underscores the need to make information and communication channels available to all concerned (students, faculty and administrators), accomplished through a common information file and "multiple/direct" lines of communication.

"We use the term curriculum to refer to the entire course of study available to a person, whether undergraduate or graduate. We use the term "academic action plan.""

"By "management" we mean decisions designed to maximize educational goals.

"It is up to each user of the
(Continued on page 3)

The 'U' wants to shoot you-with a camera

Beginning this week, all faculty, staff and employee identification cards are being updated. Identification cards now held will not be valid after April 1.

Pictures for new ID cards are being taken in Room 142 Administration Building, Monday through Friday, 8 a.m. to 12 noon and 1 to 5 p.m.

Colleges whose faculty and staff are scheduled for picture-taking this week (Feb. 16-20) are: Agriculture and natural resources; arts and letters; business, and communication.

Scheduled to be photographed next week (Feb. 23-27) are: Education, engineering, home economics, human medicine and social science.

Blank ID card forms have been sent to all deans and administrative officers for distribution to faculty and staff. Each new card will expire on the holder's birthday in 1975.

The REMAINING schedule for ID card pictures-taking is:
Feb. 28-27 - Natural science, University College, veterinary medicine, James Madison College, Lyman Briggs College, aerospace studies, military science, campus park and planning, public safety department, international programs.

March 2-6 -- Continuing education, dormitory and food services, physical plant, procurement and University service.

March 9-13 - Student affairs, admissions and scholarships, registrar's office, intercollegiate athletics, alumni association, personnel office, placement bureau, executive vice president's office, School of Advanced Graduate Studies, Office of Institutional Research, provost's office (including Educational Development Program and Center for Urban Affairs). University libraries, vice president for business and finance, comptroller's office, research contracts, internal audit, data processing, information services.

Ball, Karabatsos will receive Sigma Xi research awards

The University's top two science awards will go to a leading water quality researcher and to a young professor of chemistry.

Robert C. Ball, director of the Institute of Water Research, will receive the Sigma Xi senior member award, and graduate student Gerasimos J. Karabatsos will receive the Sigma Xi junior award.

The junior award, presented annually to an outstanding student - 40 researcher, will go to Karabatsos at next Wednesday's Sigma Xi meeting that begins at 8 p.m. in 158 Chemistry. Ball will receive his award in April.

Ball, limnologist who joined the faculty in 1947, has directed the water research institute since 1966. He is a leader in MSU's research efforts dealing with the nation's water pollution problem, and is now responsible for the University's studies on plant and animal systems in lakes and streams.

Ball pioneered research in lake fertilization, and the use of radioactive phosphorus and other isotopes in aquatic systems. The new lake system plan here - in which sewage is processed as it passes from lake to lake - is one of his most recent contributions.

He is also a professor of fisheries and wildlife. Ball has a master's degree from Ohio State University and Ph.D. from the University of Michigan.

Karabatsos is nationally recognized for his work in nuclear magnetic resonance spectroscopy of molecules. He will lecture on his research at Wednesday's Sigma Xi meeting.

He is one of the youngest full professors in the chemistry department and is one of the youngest elected to the Greek Academy of Science.

NUC meets tonight

The local chapter of the New University Conference will meet at 7:30 tonight to discuss politics, teaching and the ideology of professionalism. The meeting is open to the public.

The New University Conference involves graduate students, faculty and staff, "who are concerned with constructing alternatives to our present social system," according to Eileen Van Tassell, assistant professor of natural science and member of NUC.

Group to seek candidates in osteopathy

A search committee has been appointed to identify and rank three or four of the nation's best candidates for the deanship of a state-supported osteopathic college at Michigan State.

Provost John L. Castrillon said the procedure follows traditional MSU academic guidelines for the selection of a new dean.

Acting on the committee's recommendations, the provost will appoint a candidate to the president and the Board of Trustees, which makes the appointment.

The search committee is chaired by Richard U. Byerrum, professor of biochemistry and dean of the College of Natural Science. Members are: William B. Carnegie, Lansing internist; Lawrence M. Jarrett, staff physician, Olin Health Center; Hilliard Jason, professor and director of medical education research and development, and professor of psychology; William H. Knisely, director of the Institute of Biology and Medicine; Ralph Lindberg, executive director of the Detroit Osteopathic Hospital, Inc. C. David Moal, professor of English and editor of the Centennial Review; Isabelle K. Payne, professor of nursing; and Clarence L. Winder, professor of psychology and dean of the College of Social Science.

The University is establishing the osteopathic college requires that the dean have a doctor of osteopathy degree. The law, passed last summer, calls for the college to be located "at an existing campus of a state university with an existing school or college of medicine."

Castrillon stressed that the University will continue to provide programmed expansion of medical training in the College of Human Medicine as it initiates the osteopathic program.
Bylaw change would remove 'constraint'

The proposed amendment to the faculty bylaws which was tabled by the Board of Trustees last month is intended to remove a constraint on the University Committee on Business Affairs, not to add a charge, according to Robert W. Little, chairman of the business affairs committee.

Section 5.4.9.2 of the bylaws, which defines the committee's function, now reads: "The Committee on Business Affairs shall examine and evaluate policies within the service functions and business office, exclusive of allocation of financial resources, that bear directly on the academic and research aspects of the University."

The proposed amendment would delete the words: "exclusive of allocation of financial resources.

Little favours metallurgy, mechanics and materials science, said removal of the "constraint" would help enable the committee to meet its charge.

The financial resources involved do not include salary money, student fees or state appropriated funds, he said.

Acting Vice President for Business and Finance Roger Wilkinson said this involved such areas as the registrar's office, the bookstore, the business office, maintenance and physical plant.

"The $24,000 is allocated to the office, maintenance and physical plant.

Robert J. Fairchild's box office is open 11 a.m. to 6 p.m., Monday through Friday, to the public; 10 a.m. to 4 p.m. on Saturday for Season Subscribers and 11 a.m. to 4 p.m. on Sunday. The University-Michigan Show remains on Schedule B.

"We are rethinking," Fairchild said. "The Lansing State Journal and the Lansing Press & Journal are two other sources that we will assess."

The proposed amendment would allow the committee's charge to be amended to enable the committee to meet its charge.

In the purview of the vice president for business and finance are overhead and other costs that are the monies received over and above a research grant for administrative costs. Passage of the amendment would allow the committee to advise on the dispersal of these allocations.

Life insurance benefits upped

Faculty enrolled in the University's life insurance program have received an increase in the value of their coverage at no additional cost in premium.

Fifteen minutes of work in benefits have been sent to some 5,300 MSU policyholders, according to Albert C. Chapman, staff benefits supervisor.

The increased coverage was effective Feb. 1. It applies automatically, Chapman said, and no signatures or new application cards are required.

Here is how the new and old coverage schedules compare:

Schedule A

Under age 45 — from $10,000 to $12,000.

45 to 65 — from $7,500 to $9,000.

Over 65 — from $1,000 to $1,500.

Schedule B

Under age 45 — from $20,000 to $24,000.

45 to 65 — from $15,000 to $18,000.

Over 65 — from $2,000 to $2,500.

"We have been asked to include employees who have a $3 a month deduction on Schedule A, and those who have a $6.50 a month deduction are on Schedule B.

Chapman said that an open enrollment — for persons who wish to subscribe to the life insurance plan or who wish to change their coverage — is likely to be held in April or May.
The COMPUTER Laboratory:
High-speed help available

With help from the computer:
- A physicist can measure the millions of events that take place when particles of atomic matter smash into each other;
- A music professor can statistically determine reaction times of musicians;
- An economist can do large-scale meal-planning for developing nations;
- A biochemist can analyze cell proliferation rates;
- A psychologist can study student attitudes.

The list runs much longer to include, at Michigan State, some 500 faculty in more than 100 departments in 14 colleges. Each year, they help consume nearly 10 million print-out pages and 23 million punched cards on the Control Data Corporation 3600 and 7500 computers in the University's Computer Laboratory.

MORE AND MORE computer users are being directed toward the new CDC 6500, which is up to four times faster than the CDC 3600. But the 6500's forte is its versatility: Remote batch terminals (there are now three on the campus, in physics and astronomy, in chemistry and engineering), with time-sharing access available on an experimental basis. The 6500 can also be linked with other computer systems, and it soon will be, through the Michigan Inter-University Committee on Information Systems (MIUCIS), which involves MSU, the University of Michigan and Wayne State University.

THE MICUS Hardware and Maintenance group has an educational interest for any given group of students. Administrators receive help from UDENS in solving a variety of personnel problems. Their efforts can be improved by closer matching of faculty interests and course objectives. The assumption that a faculty member will teach better when his interests coincide with course objectives, Winder said.

UDENS can also provide a curriculum review analysis, a statistical summary of the educational interest profiles of students, faculty and courses. Monitored regularly, these reports could help planners spot shifting patterns of interest and need among faculty and students. In other words, data on what the computer can do for students, the products of higher education say they want from the University may be applied to restructuring the curriculum.

UDENS can also help administrators review allocation of funds by objectives, rather than by department, school or college.

President Wharton said that an all-University organizational structure is needed to better accommodate the intelligent long-range plans for the next generation of major campus computing facilities. "Our computer users, both faculty and students, are already asking for more computer capability," he said.

"The University's computer laboratories and other institutions, of more effective evaluation of continuing requests for additions to present computer capabilities, and of insuring the most effective utilization of existing University computer facilities," he said.

He asked the committee to propose a structure that could:
- "Evaluate proposals to acquire computer hardware and off-campus computer services.
- "Advise on interinstitutional computer arrangements.
- "Evaluate the use of existing computer facilities.
- "Maintain a representative membership structure in a continuing campus advisory group on total University facilities."

MEMBERS of the committee, which meets each Wednesday, are: Mueller; Wrigley; Harry Eick, chemistry; Horace King, registrar; Fred Martin, computer services; Wayne Tersch, director of the University's Computing and Information Services; Paul B. Swisher, human medicine; John V. Martin, Human Learning Research Institute; Willard Warrington, Evaluation Services, Roger E. Wilkinson, University Business Office; Charles F. Slocum, Michigan Agricultural Experiment Station.

Gene Rietors, Editor

Michigan State University Faculty News, March 10, 1970
FAUZI M. NAJJAR, professor in social science and Justin Merrill College, presented a paper on "The Relativistic Fluid Dynamics in Non - Vacuo" at the American Mathematical Society on "Mathematics and the Arts." He also published "Mathematical Aspects of Re-entry Supernovae of K. Body" in the Journal of Mathematical and Physical Sciences.

G. C. Shephard, visiting professor of mathematics at CCM, has been elected a fellow of the London Mathematical Society.

J. M. GREEN, professor of chemical engineering, has been elected to the National Academy of Engineering, a society's professor of chemistry, has been elected and P r o p e r t i e s of Qu a s i - c h a i rman of the American Society for the Advancement of Science.

George A. BANNAN, professor of animal husbandry, has been named a fellow in the American Society of Animal Science.

R. D. SPENCE, professor of physics, is coauthor of "Nuclear Resonance Determination of the Magnetic Space Group of Cmce (Sub-3)-21" in a recent issue of Journal of Chemical Physics. 

P. S. SIGNELL, professor of physics, is coauthor of "Proto-Proton Bremsstrahlung Calculations," a recent issue of The Physical Review.

JACK BANS, associate professor of physics, recently delivered two lectures on "Quantum Tunneling in Superfluid Helium" at the Brookhaven National Laboratory and at Columbia University.

LINDA S. WAGNER, associate professor of English, wrote an essay on William Carlos Williams in the current issue of American Quarterly. 

DAVID D. ANDERSON, professor of American Thought and Language, is coauthor of "The Shah Abdul Latif of Bhit" in the current Literature East and West. 

FRANK SINGER, chairman of the School of Journalism, was chairman of an American Council on Education for Journalism and Mass Communication, a recent one - man exhibition of photographs at the Leland Art House in Taipei.


JAYTON SHOREY, assistant professor of social work, is coauthor of Power Motivation in Male Paranoid Personality in the November issue of Psychiatry.

HERBERT J. OBER, professor and chairman of the department of physics and space sciences, has received a citation from the Greater Lansing Coordinating Council, for his "outstanding work in developing services for the handicapped in a rural area.

JOHN MURRAY, associate professor of journalism, wrote an article on Pacific Basin business relations. 


CHARLES H. PAYNE, professor of crop and soil science, was a senior consultant to the Ministry of Agriculture in Panama in designing a federal agricultural research program in two states.

JEAN D. SCHLATER, professor of family and child sciences, is executive director of a national project to extend a long - term research goals in home economics.

H. S. GREEN, professor of education, has been appointed to the Association of Administrators of Home Economics, in a division of the Association of State Universities and Land - Grant Colleges.

A book by G. C. Rater, professor of mechanical engineering, has been recently published in Spanish by Editorial Arca de Zanaga, Spain. The book is "Diagnostic Procedures in Veterinary Bacteriology and Mycology."