## MSU freshmen close to national 'average'

MSU freshmen had better high school grades than most other freshmen across the country, according to statistics compiled by the American Council on Education.

The report noted that 72.7 per cent of the freshmen who entered MSU last fall ranked in the top quarter of their high school classes, compared to 64.3 percent nationally.

The survey of 4,766 MSU freshmen explored their backgrounds, social views, and ambitions and compared them with freshmen at 325 other American colleges and universities. MSU enrolls nearly twice the national percentage of blacks (6.7 percent against 3.8 percent nationally).

In almost all of the other areas researched, the campus group closely reflected the national norm.

A composite picture of the "average" MSU freshman looks something like this:

\*He is 18 years old, and was reared less than 100 miles from the MSU campus. His family's income falls between \$10,000 and \$15,000 per year. He relies primarily on his parents for financial support RIAL Sal cause, but believes there is does not regard money as a major something he can do personally to concern.

\*His father had college training and is now employed as either a businessman, engineer or skalled U worker.

\*He classified himself as liberal to middle - of - the - road politically (only 3.8 percent of the MSU freshmen said they were "far left" in their political preferences), and said he plans to register and vote in the 1972 presidential election.

\*He has not demonstrated for any

Isolal cause, but believes there is something he can do personally to 197 change society. He feels strongly about a number of social issues, particularly pollution, population UN aforence and women's rights (even ES male respondents emphasized equal job opportunities for women above all other social issues they were asked about except pollution control).

Archives

\*He does not favor the legalization of marijuana (although the division on this question is close).

(Continued on page 4)

MSU News-Bulletin

Vol. 3, No. 14

Michigan State University

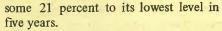
Jan. 20, 1972

## Classroom TV: More sophisticated, a wider variety of uses and users

The use of television in MSU's classrooms continues to grow while it gets smaller.While the University's Instructional Television Services (formerly called Closed Circuit Television) are being put to more and varied uses, the number of student credit hours taught on TV is decreasing. And both of these facts reflect what much of higher education is trying to

do: Encourage individualized and specialized instruction, and, when feasible, move away from the large lecture sessions.

Erling Jorgensen, director of instructional television (ITV), reports that in 1970-71 the number of courses using TV and their total enrollment increased over 1969-70. But the total of TV student credit hours dropped by



The resulting swing toward more selective and use of classroom TV actually increases the demands on the people and the equipment in Instructional Television Services, Jorgensen says, although the number of people in ITV has decreased in recent years.

\* \* \* SOON AFTER IT was introduced here some 15 years ago, Jorgensen says, television was widely used—but almost exclusively to transmit lectures from one classroom to more classrooms. Capitalizing on the versatility of TV has been a more gradual process.

Today instructional television is reaching a new level of sophistication. Jorgensen points to a number of ITV

projects that involve selective use of TV in the classroom. In one geography course, Jorgensen

In one geography course, Joigensen reports, a heavy emphasis on TV's unique abilities—to present slides, film and animation in a single presentation—prompted students to report that in at least one course they preferred the TV material to that once provided in a live lecture. That's a marked change from earlier studies in which students reported acceptance of, but not enthusiasm for, classroom TV. \* \* \*

INSTRUCTIONAL TELEVISION'S new emphasis on production rather than distribution is reflected in Jorgensen's annual report:

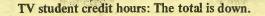
\* Revision of a beginning shorthand course into 36 videotaped lessons that (Continued on page 5)

# Health, pregnancy plans proposed by A-P group

A family health plan and a pregnancy benefit plan have been proposed by the A d m in is trative-Professional Association's Executive Group and submitted to Executive Vice President Jack Breslin.

Although A-P Association officers said they have not yet received a response to The plan recommended by the A-P Association provides nine-months' full-time service for pregnancy leave eligibility, and it states that an employe can return to work within four months following termination of pregnancy if she is physically able.





their proposals, the assistant director of equal opportunity programs reported that details are already completed for a revised University pregnancy leave policy.

Mary P. Sharp said that a plan is being developed to accommodate both faculty and nonfaculty women. She explained that such items as eligibility, use of sick leave for pregnancy leave and other details still remain to be completed.

Her initial recommendation called basically for a three-months' pregnancy leave, allowed the application of sick leave to cover part of the time, stated that an employe would return to work at the same level and stipulated that 10-months' full-time employment constituted eligibility. And it says the employe must notify the University two weeks before she returns to work, and that she must be returned to work either in her job or in another of equal rank, without loss of employment benefits.

The association's proposed family health plan states that an employe be allowed to use sick leave, vacation, personal leave or be granted leave without pay for a maximum of 30 days "if necessary to be absent from work to assist spouse or family due to illness, injury, death, pregnancy or childbirth." It would also permit an employe to return to work after a family health-related absence at his or her same position.

## The Forum

The Forum is intended as a platform of opinion for readers of the News-Bulletin. Comments, and letters to the editor, may be addressed to the editor, Room 324, Linton Hall. We reserve the right to edit contributions when necessary to meet space and other requirements.

## Some questions on faculty compensation

Note: Following is a progress report of the Faculty Affairs and Faculty Compensation Committee on the salary schedule, as presented by Frederick Williams, professor of history and committee chairman, at the Jan. 11 Academic Council meeting.

\* \* \*

The purpose of this progress report is to acquaint you with some of the problems facing the FAFCC as it undertakes to prepare recommendations regarding faculty compensation. Since the committee at this moment is attempting to measure fully this assignment, the report will be devoted largely to raising rather than answering questions.

It seems appropriate to begin by calling attention to the newness of the FAFCC. The FAFCC opened shop on July 1, a short six months ago. Immediately the committee went to work on salary increases for 1971-72, and because of unusually complicated and totally unexpected developments, that work required a lion's share of the committee's attention through the first week of October.

No sooner had the salary increases been approved than the question of salary secrecy came to the forefront, and that subject occupied a large portion of the committee's time until the Christmas break.

All the while the committee worked on a variety of items, including next year's asking budget, fringe benefits, the status of the Academic Senate, consultantship leaves, and the interim grievance procedure. Now, as the new year begins, the committee has been reorganized into three subcommittees, creating a structure that ought to enable us to discharge more efficiently and effectively the duties prescribed in the "Bylaws for Academic Governance."

OF ALL THE WORK on the committee's agenda, the most important item, and one requiring immediate action, is the salary schedule. Clearly the existing schedule contains inequities, both of the individual and class variety. If we can agree on that point, and I believe we can, it behooves us not to waste our time trying to fix blame, but to study the problems and to find solutions that will eliminate existing inequities and lay the foundation for a more just and equitable salary structure for the future.

Work on the salary schedule began during the Christmas vacation and will continue until completed. In all of that work the committee will make every effort to be as objective, fair and realistic as possible. The task will require careful, time-consuming study and the help of every member of the academic community who can make constructive contributions.

How long this study will take cannot be determined at this juncture, but there is every reason to believe that a set of recommendations can be ready for fiscal year 1972-73. In other words, we plan to complete recommendations in time to affect next year's salary schedule. Of course, those recommendations cannot become operative without the approval of the central administration. \* \* \*

THE COMMITTEE'S NEED for time can best be demonstrated by identifying some of the questions that must be answered. Here are a few: What is the quickest and best way to eliminate such class discrepancies as those affecting women, 12-month faculty, departments and colleges? If base salary levels for each academic rank is one important way of solving this kind of problem, what rationale should be used to set those levels?

Should those levels be set and adhered to at once? Or should they be phased in over a period of two or three years? Should they affect every faculty member below the base level for his rank? Or should there be a flexibility which allows for exceptions where circumstances warrant them? If base levels are set, should we resolve that henceforth every promoted faculty member must receive at least the base salary of his new rank? In any event, should or should not every academic unit correlate its promotional policy with its salary schedule?

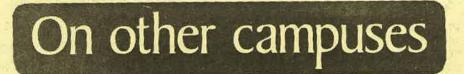
Assuming that base salary levels are set, how should we rectify inequities unaffected by that action? In dealing with the problem of individual inequities, should the committee go beyond formulating guidelines for the academic units to follow?

Should the decision - making process regarding salaries be the sole responsibility of administrative heads of academic units? Or should there be faculty salary advisory committees? If there is considerable support for advisory committees, should they be required? Or should they be set up only by units that want them? In any event, should administrative heads of academic units be held accountable If adequate money for upgrading salaries by setting base levels cannot be obtained from the Legislature, how should we finance such a program? And what should be done about faculty members who would not be affected by the base level approach? There are many: 171 of 203 instructors, 309 of 465 assistant professors, 195 of 481 associate professors, and 522 of 795 full professors. In all 1,197 of 1,945 or approximately 62 percent of faculty in the four ranks would be unaffected by establishing the base levels mentioned above. How should we rectify inequities among those members of the faculty?

These are some of the questions that face the committee. There are many others. To provide answers which will facilitate the establishment of an equitable and realistic salary schedule, we need time, and we need help. Several colleagues have already forwarded thoughtful suggestions to the committee. We invite all members of the academic community to express their views, either by writing to the committee or in presentations at one of the hearings planned for the near future.

To secure additional assistance we intend to call upon persons with special qualifications to serve as advisors or consultants. The task is a difficult one and will require the cooperation and best thinking of everybody. The committee, believing that all interested persons should be heard, is prepared to listen and to study carefully every serious proposal it receives.

-FREDERICK WILLIAMS



LAYOFFS AT WAYNE. More than 250 faculty and academic staff at Wayne State University are on notice that their contracts may not be renewed for 1972-73 because of a predicted budget deficit. They are among nearly 600 nontenured faculty whose appointments expire this June 30. In a letter to the American Association of University Professors, WSU Acting Pres. George E. Gullen Jr. said that the 250 persons had been notified in December. Some have already been advised that they would not be recommended for continuing appointments, he said, and others were told that they would be retained if the budget outlook improves.

U - M STUDIES MERIT POLICY. The University of Michigan has retained an outside consulting firm to help U - M formulate a comprehensive personnel compensation policy for its more than 5,000 professional and administrative employes on three campuses. Purpose of the effort, according to Chief Financial Officer Wilbur K. Pierpont, is to provide U - M "with improved systems for merit review, merit promotion, and transfer and other salary - related matters." He said the study is to be completed in about six months.

MINORITY PREFERENCE AT MINNESOTA. The University of Minnesota has announced that it will give preference to members of minority groups and women in filling administrative and professional vacancies. A directive to provosts, deans and department heads urges them to improve the ratio of minority groups and women, and instructs units to name a person in each department to be responsible for insuring equal employment opportunity.

UNIVERSITY CLUB DISTRESSED. The University Club at the University of Wisconsin, Madison, is in "deep financial distress," according to its board of directors. The board said that unless the club gets a "substantial number of dues - paying members," it will have to close in four or five months. The club currently has 135 members who pay dues ranging from \$25 to \$60 a year, although an estimated 600 persons make use of its meeting rooms each month.

A WOMAN CHANCELLOR. Indiana University has its first woman chancellor. She is Sylvia E. Bowman, recently named chancellor for regional campus administration. A long - time faculty member and former chairman of arts and sciences at the IU Fort Wayne campus, she succeeds John W. Ryan, who is now IU president.

to their respective faculties for their decisions on salary distribution?

In all policy-making, whether it relates to classes or individuals, what weight should be given to such considerations as the market place, length of service, and productivity?

\* \* \*

THERE IS, of course, the matter of money. Elimination of only the most glaring inequities requires a large amount of money. For illustrative purposes the committee made a calculation based on the following arbitrary base salary levels: For 10-month faculty - \$9,000 for instructors, \$12,000 for assistant professors, \$15,000 for associate professors and \$18,000 for full professors.

The 12-month equivalents would be \$11,250 for instructors, \$15,000 for assistant professors, \$18,750 for associate professors, and \$22,500 for full professors.

Using up-to-date and complete data which specifies the number of faculty at various thousand - dollar levels, and which indicates rank and type of contract (10-month or 12-month), the committee finds that the cost of establishing those levels at once would be approximately 1,050,000. That sum is approximately the amount required to give the faculty a 2½ percent average salary increase.

To avoid possible misunderstanding the committee reiterates that the above base levels were arbitrarily selected for illustrative purposes only. The committee is neither disposed nor prepared to defend them. Terretere

PRESIDENT STAUGHTON LYND? Radical history professor Staughton Lynd, formerly at Yale University, was the top vote getter in a student - sponsored primary to endorse a successor to retiring Pres. Novice Fawcett at Ohio State University. More than 20,000 students, faculty and staff cast votes, and Lynd received 11,000. He won in a runoff over Dick Gregory, who had 5,000 votes. Trustees said they would give Lynd careful consideration.

SUPPORTING 'RENAISSANCE SCHOLARS.' Faculty and staff at Pennsylvania State University are being asked to give more support to that school's Renaissance Fund — a source of grants, aids and other support for students or prospective students who otherwise might not have the change to go to college. The fund's directors — faculty, students, alumni and trustees — have allocated some 30,000 for this year's 28 scholars. But in order to meet four commitments for this year's and future scholars, the fund will need 120,000 by 1974.

U - M PETITION DISMISSED. The Michigan Employment Relations Commission (MERC) has dismissed a petition by the University of Michigan Teaching Fellows Union for a collective bargaining election. MERC ruled that the proposed unit was not an appropriate one for bargaining, and said that an appropriate unit should include all graduate assistants.

## Around the campus: A weekly review

## More help for Chicanos

New efforts to strengthen programs for Chicanos — including a wide range of special services, education and outreach functions — were announced last week by President Wharton. He said that the programs will add to or improve upon existing activities. They were developed, Wharton said, after a review of programs was made to find any weaknesses or to see where more could be done with current resources.

• A Lansing Chicano organization, Sol de Aztlan, Inc., had issued statements last fall critical of the University's efforts for Chicanos (News - Bulletin, Oct. 14, 1971), and the Lansing branch of the American Civil Liberties Union has asked for an investigation into hiring and other practices of both the extension service and the College of Agriculture and Natural Resources (N -B, Jan. 13).

Review of MSU's Chicano programs, plus those involving other minorities, will be continuous, Wharton added. "Only in that way can we make more effective use of our resources and be more alert to needed changes and improvement, he noted. "This is why it is particularly important to strengthen advisory assistance to appropriate University officials."

Wharton listed other initiatives from throughout the University:

## COOPERATIVE EXTENSION SERVICE:

1. The director of CES, George McIntyre, will name an advisory committee of Chicanos from around the state to help CES statewide programs be, more responsive to Chicano interests. Among areas to be considered by the committee are: enlarging the Expanded Nutrition Family Programs and hiring more Chicano bilingual aides and staff; enrolling more Chicano families and youth in existing CES programs; selecting and training Chicanos as 4 - H leaders and increasing the number of 4 -H Chicano enrollees; enlarging special Chicano programs with Expanded Nutrition Program funds and aiding in securing additional funds from other sources; and improve manpower training activities.

2. In September, McIntyre named Fred Cavazos as a special assistant to help and advise on Chicano matters. He is seeking a Chicano woman to work on the staff with Cavazos.

3. CES has authorized hiring of a Chicano in the Ingham County Extension Office, subject to county approval, to work with the county's Chicano parents and students often had difficulty in filling out the English - language forms.

3. A Chicano has been hired to work with the residence - hall aide program. This program, which uses students as assistants within the residence - hall complex, presently includes four aides.

EDUCATIONAL ACTIVITIES:

1. Provost John E. Cantlon will name a Chicano faculty member as an advisor to the undergraduate programs office, where the bulk of MSU's Chicano students are enrolled. The faculty member will advise on special educational needs and problems confronting Chicano students.

2. Under a proposal being developed in cooperation with United Migrant Opportunities Inc. and the Migrant Extension Center at Central Michigan University, MSU would enroll up to 10 Chicano students in its Agricultural Tecnnology Program. Full scholarships for the students would be supported by federal funds, under the proposal.

3. A full - time Chicano employe is being sought for the Office of Special Programs to work on academic advising of students with special difficulties.

4. The admissions office has strengthened its recruiting efforts in state high schools, among parents and in the Chicano community to attract more qualified Chicano students. Jose Gomez, appointed to the Office of Special Programs, has been working particularly on admissions activities.

5. Additional Spanish - language and Chicano cultural courses are being developed, as appropriate, in the College of Arts and Letters.

6. A proposal being prepared to secure federal funds under the Special Services of Disadvantaged Students program will contain a strong Chicano component as a result of participation of MSU Chicano students, staff and faculty in its development.

Wharton noted that the new initiatives are essentially supplemental to ongoing activities described in the reports "MSU and the Chicano Community" issued last September, and "Programs for Chicanos" issued by the College of Agriculture and Natural Resources in November.

## MSU women's meeting set

The relatively simple but often unfollowed skills that make up good verbal and written communication will be examined in this year's MSU Business Women's Club Institute Feb. 8-9 in the Union Building.

"Communication" is the theme of the institute, which opens with an 11:30 Tuesday, Feb. 8. Jack Bain, acting chairman of communication, will be the luncheon speaker. Anne C. Garrison, professor of business law and office administration, will speak and conduct a Tuesday workshop that begins at 1:15 p.m. in Parlors A and B.

Speaking at Wednesday's (Feb. 9) session in Parlors A and B will be John Lewis, director of the material management division, University services.

In the past, according to planners of the institute, some campus bosses have been reluctant to give women employes time off to attend the sessions. So they pointed out that this year's institute is made up of two afternoon sessions so that participants would not be away from their offices for a single extended period.

The deadline for making reservations for the institute is Friday (Jan. 21). More information is available from Kay Butcher (355-8434), Gloria Watters (355-5113) or Beverly Anderson (355-5141).

# College and coffee

Hundreds of Michigan early-risers will be going to college over their breakfast coffee this winter, Lawrence McKune, director of MSU's University of the Air estimates.

Courses to be offered this winter are of special interest to people with Latin-American, Mexican or Spanish backgrounds or affiliations and those with scientific bent, as well as to educators, he said.

Whole families can be studying the secrets of the universe together in a science course, "Earth, Air, Fire, Water. . .and DNA," which will be presented from 6:30 to 7 a.m. Monday, Wednesday and Friday mornings.

The literature of Julio Cortazar, Cesar Vallejo and other Spanish Americans, to be presented in "The New Consciousness: Latin American Literature in Translation," will be offered from 6:30 to 7 a.m. Tuesdays, Thursdays and Saturdays, beginning Feb. 1.

The CBS Sunrise Semester Courses, to be offered by six major television stations serving Michigan, may be taken for University credit.

Stations which bring the University of the Air courses into Michigan homes include WJIM-TV, Lansing; WKZO-TV, Kalamazoo; and WJBK-TV, Detroit.

Information on text, course outline, registration and fees may be obtained from McKune, University of the Air, 12

## Case still unresolved

The case of Eileen Van Tassell has passed beyond the need for any more action in the Department of Natural Science. That's the view of Mohamed Abou - el - seoud, associate professor who served as chairman pro tem in this week's faculty meeting at which it was decided that Miss Van Tassell's appeal process within the department is completed.

r She has been appealing the latest decision (made last fall) not to reappoint her as an assistant professor. The long - standing controversy surrounding her original nonreappointment has reached as high as the Board of Trustees (News -Bulletins: May 5, 1970; April 22, 1971; April 29, 1972).

At this week's natural science faculty meeting, it was also voted (by 23-19) not to take action to either support or contest an earlier decision not to rehire Miss Van Tassell. Department Chairman Emanuel Hackel made the decision last fall and so notified Miss Van Tassell.

One natural science faculty member said following the meeting that the matter has reached a point where, if any further appeals are made, it will be necessary "to have a kind of legal proceedings where sworn testimony must be taken and recorded."

Miss Van Tassell can still appeal to the dean of the University College, although Dean Edward Carlin said earlier this week that she had not yet done so.

## Wharton reacts to budget

President Wharton has expressed both pleasure and disappointment with Gov. Milliken's 1972-73 budget recommendations for MSU. The governor has proposed \$73.1 million in state funds for next year's general fund, an increase of \$7.8 million over the current amount, but about \$24 million less than the University had requested.

Wharton said the governor's request represented a "sincere effort" in view of the state's fiscal situation. And he said he was pleased with recommended funds for medical programs, and for programs to help the educationally and economically disadvantaged.

But he expressed disappointment that the governor's recommendations for the experiment station and extension service contained no funds for substantive improvement. Wharton also said he was not pleased that the governor did not respond to the suggestion for a law school here. Wharton said it is too early to say how MSU's other programs and priorities might be affected if the governor's budget recommendations gain eventual legislative approval.

Chicano community.

4. A Comprehensive Cooperative Extension Service Program for Migrants will be proposed for federal funding. Under the program, intransition or intrastate migrants would be used in the CES county extension offices to aid in the development and delivery of programs for migrants.

#### STUDENT SERVICES:

1. Raul Arizpe has been appointed to the Office of Student Services. He will serve half - time in the Counseling Center and half - time in the financial aids section, with special emphasis on assisting Chicano students.

2. Parents' and Students' Confidential Statements, on which financial assistance is based, will be translated into Spanish along with explanatory instructions. A study showed that a.m. luncheon in the Union Ballroom on

Kellogg Center.

## Getting rid of \$900,000

Tuition at Colorado State University was raised 45 percent this year by order of the Legislature and produced \$900,000 more than the anticipated, due to an unexpected increase in enrollment.

Unable to spend it within the budget approved by the Legislature and fearful the money would go to the state's general fund, the CSU governing board voted 3 - 2 to cut winter tuition enough to absorb \$450,000.

Possible ways to get rid of the excess: Hire more teachers, raise salaries, library acquisitions, etc. If permission is granted, spring tuitions will go up again ; if not, then the board is expected to lower spring tuitions again to keep extra money out of the state's general fund.

Prediction: The upcoming row will register on seismographs.

- From the Legislative Review, Education Commission of the States

## MSU News-Bulletin

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## Carlin to support general ed changes

Edward A. Carlin, dean of University College, says he will support the general education modification proposals in the Academic Council for the flexibility they offer.

The proposals were submitted to the Council last week after extensive study in the University Educational Policies Committee. The proposals would no longer require that the 45 credits of required general education courses be taken within University College; would allow the University College to develop upper division general education courses; and would allow any interested college to develop a proposal for a four-year degree - granting college of general studies (News-Bulletin Oct. 7, 1971). The proposals will be further discussed at the February Council meeting.

Carlin cites the following reasons for his support of the proposals:

The plan appears to give more options to students; it gives the University College (UC) faculty an opportunity to meet with upper level students, thereby utilizing talents not now tapped in that faculty; and the plan would eliminate "that element that has beaten us to death for years," Carlin said, which is the required nature of UC courses.

As a teacher, Carlin said, he knows that half the battle is over when students take a course because they want to and not because it is required. He said he does have some reservations about the proposed modifications, particularly the fact that nowhere in the document is general education defined. An ad hoc committee is currently working on a definition of criteria for general education courses through the Office of the Assistant Provost for Undergraduate Education and ultimately through the University Curriculum Committee. \* \*

CARLIN SAID he would not want to hold up the proposal until that definition is completed, but that he would "want to get a definition of general education by indirection," that is, by citing some common elements.

And regarless of how "ironclad the statement" or definition is, Carlin said, the success of a general education program relies on the integrity and will of the people involved. If any course can be designated general education, he said, then "the University has lost a good deal."

"I think general education is important," Carlin said. "I like to stress that. If the Academic Council agrees, the question is how we best go about it. And the options make sense."

He said he is surprised at what he calls the "Hostility toward general education," which is the notion that students should be free to take whatever courses they wish with no requirements.

If a university is to do more than train people to be engineers, lawyers, journalists, or whatever, then general or liberal education (some believe the terms are interchangeable) has a role to play. And, he said, it is a "matter of educating the Academic Council on the values and need for general education." He hopes for extended debate in the council.

And if it is a question of alternatives, Carlin said he would like to know what they are. But he said he will not claim there is only one way to teach general education.

\* \* \*

MORE THAN A YEAR ago, the University College developed a proposal for four-year status. That proposal will be modified according to the EPC proposal, Carlin said, and according to what he said are current tendencies among faculty – more prescriptive or tighter guidelines. The college educational policies and curriculum committees will work with that proposal, but they are awaiting the Academic Council action.

UC includes about 3200 faculty who, Carlin said, are generally in favor of the EPC proposals, though they are fearful that the proposals "might be taken as 'open sesame' for open warfare on general education."

Some nontenured faculty are afraid they would be "bounced" if the requirement is dropped, he said, but he thinks those fears are groundless.

UC has seven representatives in the Academic Council: Thomas Greer, member of the steering committee; Carlin, and five elected faculty members: Willard Warrington, professor in evaluation services; Robert Wright, professor of American thought and language; John Reinoehl, professor of humanities; Albert Levak, professor of social science, and Floyd Monaghan, professor of natural science.

**-BEVERLY TWITCHELL** 

## A constant search for

Constant search for better methods of teaching has been going forward at MSU almost from the day classes first opened in 1857 on the campus of what was then Michigan Agricultural College.

The first extensive historical record of the concern for improvement of teaching is contained in "The History of Michigan Agricultural College" authored and published in 1915 by W. J. Beal, faculty member and famed botanist. A chapter in Beal's history is devoted to an examination of campus teaching methods in 1892. These were based on annual reports in answer to a special request for Pres. Oscar Clute. Seven professors, charged with the responsibility of teaching the 345 students then attending MAC, described the innovative techniques of that day.

Some of the theories developed prior to 1892 still are sound teaching practices, but professors of that time little dreamed of some of the sophisticated technical equipment that is now at the disposal of the classroom teacher at MSU.

THE HISTORICAL annals tell of the growing use of specimens, models, illustrations and "teaching by doing." All are used today but they are supplemented by such electronic age hardware as overhead, slide and movie projectors, closed circuit television, tape recorders, computers and other devices.

Never content with the efficiencies of teaching and learning, the unrelenting pursuit of excellence goes on today. The greatest impetus came in 1963 with the organization of the Educational Development Program and the Instructional Development Service (IDS) under the direction of the provost's office. Through the branches of IDS, the Learning Service, Instructional Media Center and Closed Circuit Television, the serious business of perfecting teaching methods has been pushing ahead.

One of the early day slogans was "never teach words without things." With the basic focus of the institution on agriculture, this was a fairly simple axiom to follow 80 years ago.  $T_0$  some extent MSU may come full circle in this regard. In the opinion of Robert Davis, EDP director, we will be seeing more of the "learning by doing" in the years ahead in the form of part - time practical experience outside the classroom.

High regard for careful craftsmanship as part of the learning process was apparent in those early reports. One professor even went so far as to inject moral implications into his written observations. Describing the teaching of mechanical engineering, Prof. L. P. Breckenridge philosophized: "It is not possible for men to work so carefully, to get every object made so that it will be a true fit, and not reap some moral benefit from the habit of getting things right. The struggle for truth and accuracy in materials cannot fail to lead to a similar desire for honesty and accuracy in morals."

THE MICROSCOPE, the scalpel, the hammer, the test tube, the reagent – all were as useful then as now in learning. Special pride, however, was plainly visible in the report of the teaching of veterinary medicine by Prof. E. A. A. Grange. By that time the veterinary school had acquired 67 models of animal teeth along with skeletons of the horse, cow, sheep and hog. One specimen was the lower jaw and teeth of a horse "said, upon good authority, to have been 54 years and 3 months old when he died." A prized possession was the Auzouc model of the horse which separated into 97 pieces and showed over 3,000 points for anatomical demonstration.

Zoology students were expected to acquire respectable drawing skill through a free - hand drawing course. In botany, students of that era struggled as they do today with classifications of plants.



DONALD L. MURRAY, extension national scholarship competiton

\*In assessing himself, he feels that he is above average academically, cheerful, ambitious, self - confident, and understanding of others.

Frosh survey...

(Concluded from page 1)

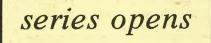
\*His major reasons for going to college are to learn more about his interests and to be able to get a better job later. He selected Michigan State University because it has a good reputation and offers some educational program that meets his specific needs.

The future?

\*He plans to go on to graduate school after receiving his bachelor's degree and has already decided on a probable career.

\*He has a number of goals set for himself ranging from professional recognition to social acceptance, but his most prominent aim is "to develop a philosophy of life."

- MIKE MORRISON



'Civilisation'

The area's first showing of Sir Kenneth Clark's highly acclaimed series, "Civilisation," is being sponsored by the Friends of the MSU Library.

Filmed in 13 segments by the British Broadcasting Corporation, "Civilisation" has been shown previously at the Detroit Institute of Art.

The series will be shown at 8 p.m. on Thursday evenings tonight through April 27 in 108B Wells Hall. Tickets for the presentation are free, but will be distributed at the Library Reference Desk on a first-come basis. Tickets may be picked up after noon on the Monday preceding the Thursday presentation.

specialist and professor of dairy science, was commended for his teaching and research during the recent annual Cooperative Extension Service conference. He was cited for work in dairy cattle sanitation and product storage.

JAMES F. NIBLOCK, professor and chairman of music, recently conducted the symphony orchestra and lectured on American music at the conservatory in Resispencia, Argentina.

GORDON H. SHEEHE, professor and director of the Highway Traffic Safety Center, has won the Distinguished Service to Safety Award from the National Safety Council.

LAURA SIMS, a doctoral candidate in human ecology, is one of two winners in a

sponsored by the Duffy-Mott Company, food packers. She was honored for research on the nutritional status of the preschool child.

An associate professor of criminal justice contends in a recent article that many parents tend to oversimplify problems of adolescents by either "ascribing to an extreme disciplinarian or extreme permissive philosophy." The article, published in Police magazine, is by ROBERT C. TROJANOWICZ.

FLOYD G' PARKER, assistant director of the Continuing Education Service and professor of education, is the new president of the Council of Educational Facility Planners. The international organization has 1,800 members involved in planning, designing, equipping, and maintaining educational facilities.

## r better ways to teach

Through the years, the main thrust of teaching - learning improvement has been to find new approaches to the textbook. With the dawn of modern technology, some of this has been accomplished through the use of colored illustrations, diagrams, and charts. Although the blackboard, or whiteboard or greenboard continues to be a basic tool of learning, the birth of the overhead projector brought a new dimension to classroom lecturing. Slide - tape and motion picture technology enhanced the audio - visual concepts for learning.

Davis believes that one of the most crucial developments in recent years has been in independent study. As the tidal wave of students swept down on colleges, teaching resources had to be supplemented with a larger portion of the learning stemming from independent student effort. One great innovation here was the development of the study carrel refined into the Structured Learning and Teaching Environment commonly referred to on campus as SLATE.

First experiments took place at MSU in 1967 in the teaching of anatomy. Today 20 or more SLATE laboratories, fully equipped with tape recorders, slide and motion picture projectors for self study are in operation on campus.

REGARDED AS ONE of the pioneers in the use of closed circuit television, MSU has been the model in this area for many other higher education institutions. During 1970 - 71, CCTV served 218 courses (5,000 hours of instruction) mediating 59,549 student credit hours.

Although definitive conclusions as to the superiority of TV over traditional methods of teaching are hard to establish, Davis points to many advantages that have been established.

TV is primarily considered a means of distribution of educational information. An unlimited number of students can be taught in one sitting with a substantial saving occurring when 500 or more make up the composite audience. Especially useful is the repetition of critical events that would not normally occur again. Motion pictures, lectures and demonstrations by outstanding professors from other institutions, segments from network programs and other forms of audio visual materials are transmitted throughout the extensive campus closed circuit TV network.

Not all of the effort toward the improvement of teaching - learning embraces hardware. Other emphases involve development of a behavioral technology, definition of objectives for the student, and the demonstration and identification of competencies of the student.

Of significance, too, is feedback to the faculty. Much progress has been made in the student instructional rating process and its use by the faculty to improve their performance. Davis calls attention to an evolving new kind of attitude on the part of the professor. "He doesn't tend to isolate himself and he more readily adjusts his behavior to the students and their reactions."

WHEN IT WAS pointed out that MSU offers virtually no organized in - service training programs to its faculty involving better teaching methods, Davis was quick to agree that this is a high priority item toward which he and his colleagues are reaching.

"It's largely a matter of money, staff and facilities," he explained. "It would probably take something like two and a quarter million dollars to establish such a training program to be conducted over a five - year period, including a special building. No other institution has done this."

Some months ago the Esso Foundation provided a grant to the MSU Learning Service for the development of a faculty training model. This model is now available for use by MSU or any other higher education institution.

In the meantime, however, improvement of instruction continues to move forward on this campus.

-W. LOWELL TREASTER



Botanist W.J. Beal: An early developer of teaching innovations.

## Classroom TV . . .

### (Concluded from page 1)

have been made available to two other schools.

\* With an Educational Development Program grant, a TV mobile unit recorded 32 hours of music instruction in Oak Park, and the resulting tapes are used to instruct music education majors.

\* Under development, with financing from National Institute of Mental Health, is series in psychiatry dealing with suicide prevention. The series is to be distributed nationally.

During the past year, ITV also helped develop independent television systems for 10 departments (45 departments now are using 102 videotape recorders); acquired eight videotape recorders and four cameras for rentals and loans; began testing the use of computers to schedule the use of TV facilities.

IN A LOOK toward the future, Jorgensen says that large-class TV instruction will be even more likely to be replaced by "more individualized and more costly" TV use.

This means has special importance for ITV's already-overcrowded Erickson Hall facilities (where faculty who wish to screen videotapes and films must do so inside make-shift partitions in the hallway). And MSU's TV equipment, some of it dating back to 1956 is wearing out or becoming obsolete, he added.

Jorgensen says that equipping TV for color origination "must come within the next two years." Color cameras are planned for the new TV facilities in Life Sciences I.

And he also urges support for a statewide plan for telecommunications development that would, among other things, help MSU connect its campus ITV service with off-campus learning in medicine, continuing education and other areas.

-GENE RIETFORS

## The University's standing committees

Last week's News - Bulletin contained a list of faculty members of seven University standing committees. Here is a membership list of the other five standing committees, plus the committee on committees and student - faculty judiciary:

FACULTY TENURE: Martin J. Bukovac, medicine. Also included: Six undergraduates, agriculture and natural resources; John F. A.

one graduate, two student men

Bernice D. Borgman, human eecology; Scott N. Swisher, human medicine; Thomas A. Vogel, natural science; James Gallagher, osteopathic medicine; R. Glenn Wright, residential colleges (Morrill); Charles Press, social science; David D. Anderson, University College; William E. Jones, veterinary medicine; Museum Director Rollin H. Baker,

Nonnamaker; Associate Dean of Students Louis F. Hekhuis; Associate Ombudsman Theodore J. Brooks; and the vice president for student affairs (a position being temporarily filled by Vice President for Research Development Milton Muelder).

The Committee on Committees, compo

Taylor, arts and letters; Rollin H. Simonds, business; Patricia Walsh, communication arts; Stanley E. Hecker Jr., education; Donald J. Renwick, engineering; Portia M. Morris, human ecology; Arthur S. Elstein, human medicine; Joseph Meites, natural science; Jon J. Kabara, osteopathic medicine, Wesley Fishel, residential colleges (Madison); Wilbur B. Brookover, social science; Mary Tomkins, University College; Gabel H. Conner, veterinary medicine; Assistant to the Provost Kermit H. Smith, noncollege faculty. Also: three undergraduates, one graduate, two student members - at - large. Ex officio: Assistant Provost Herman L. King.

HONORS PROGRAMS: Henry D. Foth. agriculture and natural resources; William B. Hixson Jr., arts and letters; Stanley C. Hollander, business; David C. Ralph, communication arts; Keith P. Anderson, education; Martin C. Hawley, engineering; Rachel Schemmel, human ecology; Leroy M. Kelly, natural science; J. Warren Anderson, osteopathic medicine; Keith A. Williams, residential colleges (Morrill); Thomas L. Conner, social science; Gladys Beckwith, University College; Allan L. Trapp, veterinary

large. Ex officio: Grank H. Blackington, director of Honors College.

INTERNATIONAL PROJECTS: Merle L. Esmay, agriculture and natural resources; Herbert C. Jackson, arts and letters; Hendrik Zwarensteyn, business; William A. Herzog, communication arts; Samuel A. Moore II, education; Ian O. Ebert, engineering; Modesto Yang, human ecology; Donald W. Weston Jr., human medicine; James W. Butcher, natural science; Frederick R. Becker, osteopathic medicine; Robert V. Edington, residential colleges (Madison); Eugene Jacobson, social science; Lawrence H. Battistini, University College; Gordon R. Carter, veterinary medicine; Sheldon Cherney, continuing education, noncollege faculty. Also: Three undergraduates, two graduates, two student members - at - large. Ex officio: Ralph H. Smuckler, dean of international programs.

LIBRARY: Roy S. Emery, agriculture and natural resources; George P. Mansour, arts and letters; Herbert Kisch, business; J. David Lewid, communication arts; Elizabeth H. Rusk, education; Carl M. Cooper, engineering; noncollege faculty. Also: Three undergraduates, two graduates, two student members - at - large. Ex officio: Richard E. Chapin, director of libraries.

PUBLIC SAFETY: James E. Bath, entomology; Jack H. Briit, dairy; Betty L. Giuliani, institutional research; Robert A. Harris, music; Louis A. Radelet, criminal justice; Andrew Timnick, chemistry; Jacqueline A. Wright, nursing, Also: Four undergraduates, one graduate, two student members - at - large. Ex officio: Arthur R. Brandstatter, director, criminal justice; Richard O. Bernitt, director, public safety. (According to the bylaws, this committee is constituted of seven faculty members, two of whom are from lower ranks, and seven students.)

STUDENT AFFAIRS: Frederick H. Horne, natural science; Richard J. Lewis, business; Michael Moore, social science; Franklin D. Platt, University College; Jane E. Smith, Lyman Briggs; George M. Van Dusen, engineering. Also: Five undergraduates, four graduates, two student members - at - large. Ex officio: Dean of Students Eldon R.

of Academic Council members and a committee of the Council, includes: William T. Magee, agriculture and natural resources: Paul O. Harder, arts and letters; Hendrik Zwarensteyn, business; Patricia Walsh, communication arts; Charles V. Mange, education: Leo V. Nothstine, engineering; Joanne Eicher, human ecology; Leif G. Suhrland, human medicine; Frank Peabody, natural science; John Barson, osteopathic medicine; Steven T. Spees Jr., residential colleges (Briggs); C. Keith Groty, socialscience; Albert E. Levak, University College; Glenn L. Waxler, veterinary medicine, chairman; Gwendolyn Norrell, counseling center, noncollege faculty.

The Student - Faculty Judiciary, established in the Academic Freedom Report includes: LeRoy Ferguson, social science; William H. Pipes, University College; Max R. Raines, education; James F. Rainey, business; Norma S. Bobbitt, human ecology; Lewis K. Zerby, James Madison, and a representative of arts and letters to be replaced. Also: Four students; ex officio: Dean of Students Eldon R. Nonnamaker, Associate Dean of Students, Ruth Renaud.



## Beating the rush --at 4 a.m.

Early - very early - on the morning following last week's snow storm, the job of snow clearance began. News - Bulletin Associate Editor Beverly Twitchell went for a snow plow ride and talked with snow removal crews. Here is her report.

It was almost dramatic - the dark of the campus at 6 a.m. was broken by the flashing yellow bubbletops of the snow removal trucks rushing to beat the rush of the 7 - 8 a.m. traffic.

The men had come to work at 4 a.m. in sub - zero temperatures, spreading out over the campus in 25 vehicles - pick - ups, jeeps, graders, hugh trucks - to clear the parking lots before the other 10,000 or so employes began flooding in to fill them.

Meanwhile, back at the grounds maintenance building, Bob Feyerabend, a foreman in grounds maintenance and snow removal supervisor, sat discussing snow removal plans and problems and appreciating the silent radio. The silence meant that things were going smoothly....

THE FIRST BIG SNOWFALL of winter had come the day before - too late in the morning to call in emergency crews. So by 7:30 a.m., the beginning of the normal day for grounds maintenance, snow was still falling prettily with only a couple inches accumulated.

The salt trucks go out first, to keep the streets passable, to make the problem spots (hills, intersections) safer. All day, trucks with underbody blades will keep going to keep the snow from accumulating. Bus routes have priority in all areas.

Parking areas are a lost cause this first day - the cars have already filled them, and will fill them until around midnight. So it's a 4 a.m. work call for the snow crew tomorrow.

Buried sidewalks are cleared by men who know where all those curving strips of pavement are – guided by shrubs, lampposts, buildings. At all times, the men are cautioned, avoid damage to lawns, plants, signs, bicycles, cars, and most of all, people.

Entrances to buildings are cleared and salted. On this first day, with the snow still falling until afternoon, whatever can be done for safety and traffic is done.

THERE ARE SO MANY variables in the problem of snow removal: Temperatures (the colder it is, the better traction one gets), wet or dry snow (wet snow sticks to the blades of the snowplows and is heavier, making the task longer), the time the snow begins, winds, etc., etc., etc.

And the department tries to keep one eye on the budget. To salt every parking lot every time it snows would cost the University several thousand dollars. To call in emergency overtime crews would cost the University several hundred dollars per hour.

So the department has to assume that people will take some responsibility for themselves - driving slower in the snowy parking lots, wearing rubber - soled shoes or boots, driving cautiously. Of if those who come to work early to an uncleared lot would park together, they would be less likely to get plowed in.

People are sometimes a problem. In the big snowplow trucks, even with mirrors, there is a blind spot for 40 or 50 feet behind the truck. Even with signs on the backs of the trucks warning that the vehicle may back up at any time, people still pull into parking spots just cleared by the truck, or drive right up behind the truck. And sometimes people just don't yield to the yellow flashing light - the emergency vehicle's sign of right - of - way.

EVERY MAN ON the grounds maintenance crew gets called out for snow removal - except the mechanics who are kept busy enough repairing the vehicles, or even making new parts if necessary. In a bad storm, as many as one - third of the vehicles may be in for repairs, though the mechanics can usually get a vehicle back out on the roads in 30 minutes to an hour.

Feyerabend points out that the snow removal vehicles owned by the University may not be the best for the purpose - most of them are not specialized. But that's because all vehicles used by the department are ones which are versatile and are used all four seasons.

By 8 a.m. or midmorning, whenever the lots and roads are as clear as the crew can get them, the men are back to their regular jobs - tree transplanting, gardening, trash removal, feeding the ducks. But with the aid of the Department of Public Safety, attention is still focused on road conditions, so the trucks can go out again at any time.

There are problems: The ground isn't frozen, so the snow vehicles can't get good traction. Back into grounds maintenance for chains. With this, and with no previously plowed snow mounds for guides, lawns - so carefully tended year round - (News - Bulletin Jan. 6) may get turned up with the snow.

And for Bob Feyerabend, or whatever supervisor has snow - watch for the two week emergency supervisor shift, it means restless nights, particularly in winter.

## Drawing is expanded to the third dimension

Drawings by MSU graduate students are currently on exhibit in the entrance gallery of Kresge Art Center.

The works were chosen from more than 150 submitted by students in Clifton McChesney's graduate drawing class. McChesney, associate professor of art, describes the exhibit as "expressing all the current viewpoints of drawing.

The drawings were selected by MSU's artist in residence, John S. DeMartelly, and graudate art students Rosa Younkman and Barb Klein.

The exhibit is a synthesis of both classic and current concepts of "drawing". Entries range from black and white and color, more or less representational drawings in the formal media, to works that can be described as three dimensional-in plastics, synthetics and paper.

Criteria for determining the limits of "drawing" were discussed in a seminar by DeMartelly and the graduate judges. According to DeMartelly, drawing has traditionally dealt with the use of lines in a two-dimensional plane to suggest further space and to imply a third dimension.

But current trends have extended drawing into the third dimension, to "drawings in space". The premise reached by DeMartelly and the students was that a drawing could be called such if it was set in place, more or less immobile, not requiring the viewer to complete the visual response.

A further definition of current drawing is offered by judge Rosa Younkman. She says that drawing is "more intimate than the other forms of art." Scale becomes very important and the drawing is a private thing, she adds. Lines and dimensions can also be created with a variety of materials and with planes of space.

The exhibit will run through Jan. 30. Gallery hours are 9-12 a.m., and 1-5 p.m. Mondays through Fridays, 7-9 p.m. Tuesday evenings and 2-5 p.m. on Saturdays and Sundays.

- DARIA SCHLEGA

## **BULLETINS**

### **STEERING COMMITTEE**

The Steering Committee of the Faculty will meet on Monday, Jan. 24, at 4 p.m.

in 443A Hannah Administration Bldg. to set the agenda for the Academic Council meeting Feb. 1.

## CONFERENCES -

- Jan. 21-23 Gideon Leadership Conference
- Jan. 24-26 Men, Markets & Motivation
- Jan. 24-May 1 Grand Rapids IIA Ins. 23, Grand Rapids

## EXHIBITIONS-

### **Kresge Art Center**

Main Gallery: Works from the permanent collection.

North Gallery (thru Jan. 30): Midwest Photographers: Vernon Cheek, Purdue U.; Phil Davis, U. of Michigan; Arnold Gassan, Les Sattinger, Ohio U.; John Schulze, U. of Iowa; Art Sinsabaugh, U. of Illinois; Doug Stewart, Northern Illinois U.; Henry H. Smith, Indiana U.; Charles Swedlund, Southern Illinois U.

## SEMINARS -

#### THURSDAY, JANUARY 20, 1972

- Bangladesh nationalism. Ralph Nicholas, U. of Chicago, 7:30 p.m., Con Con Room, International Center (Asian Studies Center).
- The population variable: is it? Michael F. Brewer, Population Reference Bureau, Inc., Washington, D. C. 3:30 p.m., 16 Agriculture Hall (Agricultural Economics).
- Generalized degree theory and nonlinear problems. L. Nirenberg, Courant Institute, 4:10 p.m., A304 Wells (Mathematics).
- Sodium-dependent depolarization of embryonic chick atrial cells by acetylcholine. Achilles J. Pappano, 3:30 p.m., B-449 Life Science 1 (Pharmacology).
- (<sup>3</sup>He,t) reactions, past, present and future. **R. Hinrichs**, 8 p.m., Cyclotron Seminar Room (Physics).

#### FRIDAY, JANUARY 21, 1972

Genome fractionation by DNA hybridization. Leonard G. Robbins, U. of Texas at Austin, 11:30 a.m., 140 Natural Science (Zoology).

#### MONDAY, JANUARY 24, 1972

- Sir Gal, Sir Hipfor and the Hip Arabs bring you latest news of the extension plot. **Derek Lamport**, 4:10 p.m., 101 Biochemistry (AEC Plant Research Lab).
- Knowledge, agriculture and welfare. T.W. Schultz, U. of Chicago, 3 p.m., 213 Agriculture (Agricultural Economics).
- Utilization of recycled waste in chickens. A nutritional assessment; the role of possible heavy metal contaminants in chicken waste on tissue metabolism. C.J. Flegal, 3 p.m., 103 Anthony (Animal Husbandry).
- Adoption of artificial insemination in Michigan. Evans Wright and Russ Erickson, 12:30 p.m., 126 Anthony (Dairy Science).
- Investment in multi-family housing. Robert Rasche, U. of Pennsylvania, 3 p.m., 16 Agriculture (Economics).
- Field ion microscope studies of point defects in metals. David Seidman, Cornell U., 4:10 p.m., 118 Physics-Astronomy (Physics).
- Preliminary studies on malic acid metabolism in the dog. Jim Kurtz, 4 p.m., 216 Giltner (Physiology).

#### **INTEREST GROUP**

The Faculty Folk International Interest Group will meet at 1 p.m., Monday,

Jan. 24, in the home of Mrs. J. Sutherland Frame, 136 Oakland Dr., E. Lansing. Menakka McDougal will speak on "Third Culture Experiences."

All conferences will be held in Kellogg Center unless otherwise noted.

Students and faculty members are welcome to attend these continuing education programs. Those who are interested should make arrangements in advance with the Office of University Conferences, 5-4590.

Entrance Gallery (thru Jan. 30): Graduate Drawings

- **Photographic:** 301 Student Services—The 8th Annual Military Pictures of the Year competition winners are now on view. The photographs have been on exhibition throughout the U.S., overseas military bases, and at National Press Photographers Association seminars. They will remain for the next four weeks.
- Problem-centered curricular units in mathematics. Shmuel M. Avital, The Ontario Institute for Studies in Education, on leave from the Israel Institute of Technology, 4 p.m., 304A Wells Hall (Mathematics).
- The biology, immunology and early experiments in therapy of *Herpesvirus* hominis encephalitis. A.M. Lerner, Wayne State U., 4:10 p.m., 146 Giltner (Microbiology & Public Health).

Cortisol and stress. Charles Bares, 4:10 p.m., 346 Giltner (Pathology).

- Learning and teaching in Denmark: an approach to life-long education. Andrea Larsen, 8 p.m., Green Room, Union (Social Work).
- A basic critique of the social sciences. Robert A. Solo, 4:10 p.m., 312 Engineering Bldg.

#### WEDNESDAY, JANUARY 26, 1972

- Human capital: a research opportunities auction. T.W. Schultz, U. of Chicago, 3 p.m., 213 Agriculture (Agricultural Economics).
- Cephalosporium leaf stripe of wheat. Maurice V. Wiese, 4:10 p.m., 168 Plant Biology Lab (Botany & Plant Pathology).
- Molecular maladies, mutations, malformations and mommies. James E. Trosko, 4:10 p.m., 131 Anthony (Institute of Nutrition).

### THURSDAY, JANUARY 27, 1972

- Fertility, children and population: a new economic approach. T.W. Schultz, U. of Chicago, 3 p.m., 213 Agriculture (Agricultural Economics).
- Contributors to the nutritional quality of crop plants. F.C. Elliott, D.D. Harpstead, 4 p.m., 109 S. Kedzie (Crop & Soil Sciences).
- A new design for survey feedback. Clayton Alderfer, Yale U., 2:30 p.m., Gold Room, Union (Management).
- Radicals and jordan algebras. M. Osborn, U. of Wisconsin, 4:10 p.m., 304A Wells (Mathematics).
- Vascular responses in experimental renal hypertension. H. Overbeck, 4 p.m., B449 Life Science 1 (Pharmacology).
- Previews of papers contributed to the San Francisco meeting of the American Physical Society. Cyclotron Lab faculty, 8 p.m., Cyclotron

### TUESDAY, JANUARY 25, 1972

- DARIA SCHLEGA

Optimal investment in college instruction: equity and efficiency. T.W. Schultz, U. of Chicago, 3 p.m., 213 Agriculture (Agricultural Economics).

Cultural-ecological perspectives of Nepal. Barry Bishop, 4 p.m., 106 International Center (Asian Studies Center).

Recent developments in the educational use of computers in chemistry. R.W. Collins, Eastern Michigan U., 4 p.m., 136 Chemistry (Chemistry).

Bacterial proteolytic enzymes and meat spoilage. Dennis Buckley, 4:10 p.m., 110 Anthony (Food Science & Human Nutrition).

Microbial sources of protein. Charlotte Thompson, 12:30 p.m., 102 Human Ecology (Food Science & Human Nutrition).

Evaluation of viability tests for cold stressed plants. **Basil Stergios**, 4 p.m., 206 Horticulture (Horticulture).

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Seminar Room (Physics).

The effects of vicarious consequences on imitative prosocial behavior. Luis Fernandez, Stanford U., 4 p.m., 304 Olds (Psychology).

Effects of fire on the ecosystem with special reference to ungulate ecology. W. Alan Rodgers, Miorubo Research Center, Selous Game Reserve, Tanzania, East Africa, 1:30 p.m., 221 Natural Resources.

FRIDAY, JANUARY 28, 1972

Women's new economic commandments. T.W. Schultz, U. of Chicago, 1 p.m., Parlor A, Union (Agricultural Economics).

Wage change and employment growth in Latin American industry: some econometric evidence. John R. Eriksson, Agency for International Development, Washington, D.C., 3 p.m., 3 Marshall (Econometric & Economic Development)

Observations on amitotic cell division. R. Neal Band, 11:30 a.m., 140 Natural Science (Zoology).

For general information about MSU, call 353-8700.

## MICHIGAN STATE **UNIVERSITY**

# Calendar of Events

### Friday, January 21, 1972

10 a.m. Meeting of the Board of Trustees

- "U.F.O."-Probing the possibility of life existing on other 8 p.m. planets, this program portrays stories of mysterious flying saucer encounters. Tickets at door. Abrams Planetarium.
- 8 p.m. Theatre-The Black Arts Company will present three oneact plays: an adaptation of "The Spook that Sat by the Door," "The Ghost Dancers," and "The One." Tickets are available at the Union Ticket Office or the Center for Urban Affairs. Arena Theatre.
- Lecture-Concert Series-The Alvin Ailey American Dance 8:15 p.m. Theatre will present the cultural heritage of the black American. The company of 16 young dancers combines dance forms with instrumental music, song, and acting techniques. Auditorium.
- 10 p.m. "U.F.O." (see above). Abrams.

### Saturday, January 22, 1972

- Fencing-Milwaukee Tech, Lake Superior State. IM Bldg. 10 a.m. 1 p.m. Block and Bridle Club-Preliminary showmanship for Little International. Livestock Pavilion.
- 2:30 p.m. "U.F.O." (see Jan. 21). Abrams.
- 7:30 p.m. Wrestling-MSU vs. Oklahoma State. IM Sports Arena.
- 7:30 p.m. Block and Bridle Club-Little International. Livestock Pavilion.
- Basketball-MSU vs. Minnesota. Jenison. 8 p.m.
- World Travel Series-"The Spirit of Thailand" is discussed 8 p.m. by Bob Davis. Auditorium. "U.F.O." (see Jan. 21). Abrams. 8 p.m.
- Black Arts Company (see Jan. 21). Arena Theatre. 8 p.m.
- "U.F.O." (see Jan. 21). Abrams. 10 p.m.
- Black Arts Company (see Jan. 21). Arena Theatre. 12 a.m.

#### Sunday, January 23, 1972

- Concert-The Singing Statesmen (Men's Glee Club) will 4 p.m. perform under the direction of J. Strohl. Admission is free. Music Auditorium.
- 4 p.m. "U.F.O." (see Jan. 21). Abrams.

### Monday, January 24, 1972

Great Issues Series-"The Cage," a prison drama written, 8 p.m. directed, and acted by a company of ex-convicts from San Quentin, will be presented by ASMSU in conjunction with the University College Symposium on Human Justice. MSU Auditorium.

## BULLETINS

### **BOARD MATERIAL**

'Material for the February 18 meeting of the Board of Trustees is due in the office of the executive vice president or the provost by January 28.

### **CDC 6500 WORKSHOP**

A one-day workshop, "Introduction to Computing on the CDC 6500,"

will be held Saturday, Jan. 29, from 8 a.m. to 6 p.m. Topics include: punch card equipment, teletype usage, programming concepts, and BASIC programming language. No prior knowledge of computers is necessary. Registration is \$5, and must be made by Jan. 27 through the Program Library, Computer Lab. For information, call 3-3975.

### SHANGRI-LA

Tickets for the "Scholarship Shangri-la" benefit luncheons may now be purchased by Faculty Folk and Newcomers members from Mrs. William Magee, 3782 New Salem, Okemos; Mrs. James Tiedje, 1646 Lindbergh, Lansing; or Mrs. Stuart McDougal, 4720 Huron Hills, Okemos. Proceeds from the 14 luncheons, to be held Feb. 9 and 11, will go for scholarships for MSU coeds. For babysitting, call 337-0814 or 351-0423.

### Tuesday, January 25, 1972

Tuesuay, Jan	luary 23, 1972	
12 p.m.	Luncheon—Lyman Frimodig speaks on "Spartan Saga." University Club.	
8 p.m.	Folkdancing—International folkdancing is being taught for singles and couples. St. John Student Parish, 327 M.A.C.	
8:15 p.m.	Percussion Ensemble Concert. Music Auditorium.	
8:15 p.m.	Lecture-Concert Series—Los Indios Tabajaras, heard in concert on records, radio, and television, are two brothers who, 30 years ago, lived almost a primeval existence in Brazil with their people, the Tabajaras Indians. Fairchild Theatre.	
Wednesday,	January 26, 1972	
8:15 p.m.	Broadway Theatre Series—Featuring the score of Bert Bacharach and Hal David, the musical comedy "Promises, Promises" is based on "The Apartment" screenplay. Will Mackenzie stars as the ambitious young man with the vital key to an apartment. University Auditorium.	
Thursday, January 27, 1972		

Water Show—Synchronized swimming is done by members
of Green Splash women's swimming honorary. Women's IM
Pool.
MSU Symphony Orchestra Preview Concert. Admission is free. Fairchild

### Friday, January 28, 1972

7:30 p.m.	Wrestling-MSU vs. Purdue. IM Sports Arena.
7:30 p.m.	Swimming-MSU vs. Purdue. IM Pool
8 p.m.	"U.F.O." (see Jan. 21). Abrams.
8 p.m.	Green Splash Water Show (see Jan. 27). Women's IM Pool.
10 p.m.	"U.F.O." (see Jan. 21). Abrams.
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### Saturday, January 29, 1972

2 p.m.	Swimming—MSU vs. Iowa. IM Pool.
2:05 p.m.	Basketball-MSU vs. Indiana. Jenison.
2:30 p.m.	"U.F.O." (see Jan. 21). Abrams.
3:30 p.m.	Wrestling-MSU vs. Illinois. IM Sports Arena.
8 p.m.	"U.F.O." (see Jan. 21). Abrams.
8 p.m.	Green Splash Water Show (see Jan. 27). Women's IM Pool.
8 p.m.	World Travel Series-Harry Reed speaks on "The New
	Holland." Auditorium.
10 p.m.	"U.F.O." (see Jan. 21). Abrams.

#### **MSU PUBLICATIONS**

"This is Michigan State University," a comprehensive statistical record of

the University, and "Facts in Brief," a capsulized description of MSU, have been updated and reprinted. "Briefs," in larger supply, can be provided in quantity. For copies, call Information Services, 5-2263.

### **JAHN LECTURE**

Jaheinz Jahn, author of "Muntu: An Outline of Neo-African Culture,"

will present a public lecture at 8 p.m., Thursday, Jan. 27, on "African Writers and the Decolonization of the African Mind" in 103C Wells. The lecture is sponsored by the African Studies Center.

**"WOMAN IS"** Thursday, Jan. 27, is a day devoted to women with "Woman Is," held from noon to 9 p.m. on the second floor of the Union. Booths and speakers will emphasize campus services for women. A bridal fashion show will be held in the ballroom at 2 and 8 p.m.

## STATISTICAL SERVICE

A free statistical consultation service is available to anyone at MSU through

the Dept. of Statistics and Probability. Services include experimental design, choice of statistical techniques, information on available programs, programming assistance, and stochastic models. A graduate assistant is available 2 to 4 p.m., Tuesdays and Thursdays, or by appointment in 301 Computer Center. Call 5-9684.

### **SPARKS FELLOWSHIP**

Undergraduate members of Phi Kappa Phi may apply for a Sparks Memorial

Graduate Fellowship paying \$3000 to assist in a year of graduate study immediately following graduation. Application forms may be obtained from Beverly Anderson, 5-5141, 330 Engineering or D.J. Montgomery, 5-5157, 319 Engineering. The completed applications must be returned to 330 Engineering by Friday, February 4.

Information on MSU events may be submitted, for possible inclusion in the bulletins, to Patricia Grauer, Dept. of Information Services, 109 Agriculture Hall, (517) 353-8819. Deadline for submitting information is noon Tuesday preceding the Thursday publication. The calendar of events will cover an 8-day period, Friday through Saturday.