

Closed-Circuit Television Will Show Air Bubbles

Watching an amoeba through a microscope can be a frustrating experience for new biology students—especially if it turns out to be an air bubble.

And, a microscopic cross-section of a plant stem can be completely baffling to budding scientists, but closed-circuit television here may correct these stumbling blocks to greater knowledge.

"Our problem is getting across to the student what they are seeing or supposed to see in the microscope," says Dr. Lawrence S. Dillon, professor of biology here.

Because the microscope is a basic scientific tool in industry as well as biology, he and his colleagues believe students should master the use of microscopes while they are in basic biology courses.

TO DO THIS, they are utilizing a \$2,500 grant from the School of Arts and Sciences teaching improvement fund to test using a television camera mounted atop a light microscope. This will permit projecting a accurate microscope

views of specimen slides through a closed-circuit TV system to laboratories.

Closed-circuit TV also may save instructors from aching backs and cricks in their necks from bending over a multitude of students' microscopes.

This semester, as in a majority of semesters, there are more than 1,000 students enrolled in biology and vertebrate zoology courses. All are required to spend three hours a week in the laboratory using some 120 microscopes.

THROUGH USE of closed-circuit television, Dillon expects to project microscopic specimen view to as many as three laboratories at one time.

With the assistance of Dr. A. B. Medlen, associate professor of biology, and biology instructors W. V. Robertson and John Murad, Dillon hopes to have the TV equipment installed and operating by the opening of the spring semester in February.

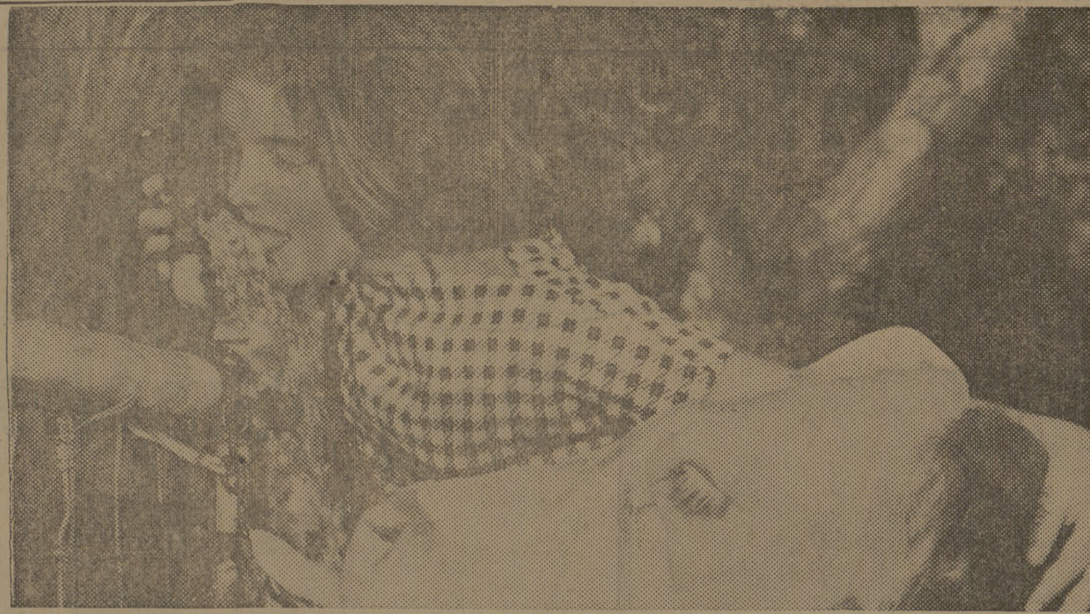
"Through use of this closed-circuit television microscope, the in-

structor will be able to project on the TV screens an image of prepared slides, live protozoa or other material which the students are studying," Dillon said.

The slide can be moved about to show different areas and enlarged to suit the instructional needs, he added. Students will be expected to make more efficient use of their microscopes.

"IT IS NOT unusual for a new biology student to spend time watching an air bubble, which because of light refraction and gravity movement, appears to be an amoeba," Dillon said. "Some have even made drawings of such specimens."

The entire closed-circuit plan is part of preliminary planning for the new Biology Building wing that will be built soon.



Wendy Parriott, 12, a 4-H Club member from La Puente, Calif., shares a cool drink with her 804-pound Hereford "Hadacal," as Wendy gets ready to enter the animal in competition for grand champion honors at the 37th GWE Livestock Show.

White House Confirms JFK Charity Gifts

WASHINGTON (AP) — President Kennedy has contributed all of his government salaries to charity since 1947 when he entered Congress, White House sources said Wednesday.

In line with this, informants said, Kennedy will contribute his \$100,000 presidential pay to charities this year, as he did last year. However, the 1961 salary didn't quite hit that total since he was not inaugurated until Jan. 20.

Kennedy is doing the same as another wealthy president before him, Herbert Hoover, did three decades ago.

Kennedy is able to pay his own personal expenses because of identical trust funds set up by his multimillionaire father, Joseph P. Kennedy, for all of his children in 1926, 1936 and 1949.

AT THE TIME of Kennedy's inauguration, his press secretary, Pierre Salinger, told newsmen that the President had a gross net income of about \$500,000 a year — about \$100,000 after taxes — from the trust fund investments.

Newsman calculated that figuring an average return of about 5 per cent on the investments, a \$500,000 annual income would represent principal of around \$10 million.

Kennedy and his brothers and sisters get control of the principal in their trust funds on a step-by-step basis.

When he was 40, Kennedy received title to one-fourth of the principal invested for him. When he reached 45 last May he received another 25 per cent.

FOR SOUTHWESTERN TITLE Checker Players Set Meet

Serious-minded checker players — many of them champions — will arrive here over the Thanksgiving holidays to take part in the Southwestern Open Checker Tourney Nov. 24-25 in the Memorial Student Center.

The tourney is open to players anywhere in the world and the winner will be recognized as the "checker champion of the Southwestern U. S."

According to J. Wayne Stark, chairman of the tourney steering committee, play will begin in earnest at 9 a.m. Saturday, Nov. 24. The tourney will be conducted on a modified "Swiss System" and

there will be one class of players only. There will be seven rounds of tourney play, with two games constituting a round.

PRIZES FOR the tourney include \$100 and a trophy for first prize and \$50 for second place. In addition, there will be many book prizes. Official referee and scorekeeper for the tourney is R. E. Hawkins of Dallas.

H. L. Cravens Jr. of Brownwood is chairman of the tourney prize

committee. A professor of political science at Howard Payne College, Cravens is the state checker playing champion for 1962 and looks upon checkers as a pastime that requires patience, knowledge of the game itself and concentration.

"No one has ever been able to figure out the number of variations possible in a game of checkers," says Cravens. "There are 137 different plays possible at the opening of a game."

Cravens can play 30 or 40 checker opponents at a time.

MSC Radio Group Plans Steak Fry To Raise Funds

The Memorial Student Center Radio Committee will sponsor a steak fry in Hensel Park Dec. 1 as part of a fund raising campaign to buy a new receiver for the club station, W5AC.

The new receiver, a Drake Model 2-B, will provide more selective reception of messages. Members won't have as much trouble with unwanted signals once the new set is in operation. Faster and more efficient student service for handling messages and phone patches will also be possible.

Two people can actually carry on a telephone conversation over the air because of the phone patch service. Through special features of the set actual voices of one party may be picked up by the transmitter and conveyed to the receiver where they are heard by the second party.

Friday during Convocation, W5AC will have communication stations at five locations on campus. At the stations visitors may send messages, obtain information concerning the day's activities and gather information about the campus. These stations will be in operation from 7 a.m. - 5 p.m.

Many A&M Education Majors Concentrate On Math, Science

With greater emphasis on science and math subjects in public schools, more than 28 per cent of the men in education courses here are preparing to teach in these fields.

A&M has 518 students studying to become school teachers, Dr. C. H. Groneman, co-ordinator of

the A&M Council on Teacher Education, announced Wednesday.

Noting Nov. 12-17 is National Education Week, Groneman said 6.2 per cent of the A&M students are enrolled in teacher education programs.

A total of 149 students have declared teaching majors or minors in chemistry, math, science, physics and biology.

The students are enrolled in teacher education programs offered by the departments of education and psychology, health and physical education, agriculture education and industrial education, he said.

In addition to more than 500 men in undergraduate teacher education programs, 244 students are enrolled in graduate classes with 25 in the industrial education doctoral program, Groneman said.

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