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## Teaching Teaching

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# TEACHING TEACHING

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The role of a modern Anatomy department is threefold (Metcalf, 1970):

1. To teach anatomy and its sub-disciplines, gross anatomy, neuro-anatomy, microscopic anatomy and embryology, to people who wish to learn it.

2. To advance the science of anatomy—the structural basis of function.

3. To train graduate students for a future role as anatomy faculty.

This article will concentrate on a portion of the third function, on the training of graduate students as teachers. It will not deal with the training of graduate students as research workers which, though equally important, already receives a great deal of attention at all reputable schools.

Our "Guidelines for Graduate Students" require all candidates for degrees in our department to teach. Much of this teaching takes conventional form, except that it is usual for faculty and other graduate students to attend classes so that some guidance in class management and conduction, proper use of audiovisual aids, etc., is possible. Several courses

in the department have experimental formats (Metcalf et al., 1969; Torbett and Metcalf, 1970; Jacobs, 1970; Rolston, et al., 1969) and the graduate student teacher is exposed to a variety of modern teaching and evaluation techniques (Metcalf et al., 1970; Moffatt et al., 1970).

In a recent survey (UMCRLT, 1967) it was reported that the training programs in teaching for graduate students who were not enrolled in a College of Education varied greatly across the nation. Many, although surprisingly not all, departments offer instruction in class conduction in the same sort of manner as ours. As we do, many departments also involve graduate students in such matters as examination design, grade assignment and the administrative decisions of course conduction. Some departments go further than this and routinely allow graduate students autonomy in such areas. We feel that this should only occur in unusual circumstances.

The same survey, however, pointed out that there were other aspects of the functions of a college teacher

which most departments did not teach to their graduate students. In particular such areas as the psychology of thinking, learning and teaching; the assessment not merely of students but of courses, etc. It is our belief that the graduate student should have access to this sort of training.

Accordingly, in the fall of 1969, we set up a course for graduate students who had taught or were teaching in anatomy courses. This "Workshop in Anatomical Teaching" had as its objectives that, at the end of the workshop, the student should be able to write a course description for the type of course in which he is most interested, such that he clearly indicates:

1. The behavioral changes he would aim to produce in his students, i.e. his course objectives.

2. The teaching methods he would use and how they relate to his course objectives.

3. The methods by which distractive and aversive techniques might be minimized.

4. The methods by which student interest would be stimulated and maintained.

5. The methods by which student achievement of his objectives would be measured.

6. The factors which influence his choice of priorities in determination of course content.

7. The methods by which he would evaluate his course.

The workshop based many of its discussions on assigned readings. In addition to some of the appropriate "Memos to the Faculty" published by the University of Michigan Center of Research in Learning and Teaching, we included five paperback books:

three by Mager, one by Skinner and one by Schoer. Major points raised by these authors were discussed in terms of:

1. Whether we accepted their conclusions.

2. Whether the points raised were relevant to our particular type of student and teaching situation.

3. Whether they were practicable, i.e., had we available or attainable, space, staffing, money, etc. to carry them out.

Later discussions centered upon suggested course outlines submitted by members of the workshop. These outlines were discussed in terms of the objectives of the teaching workshop.

The evaluation of the workshop must be based on its success in enabling its members to meet its objectives. The course outlines produced by our members were of high standard in that they did demonstrate the fulfillment of the workshop objectives. Moreover, we were able to look for changes in the way most of our members handled their teaching duties during this period. Although difficult to measure, not only the impartial observer but the teaching assistant himself was able to see that much more care was being paid to the lessons of the workshop during every teacher/student contact. The enthusiasm produced in both parties in these contacts was a very gratifying finding, which we attribute in part to the "Workshop in Anatomical Teaching."

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## NSF Reports 1970 Salaries

Statisticians earned the highest median salaries (\$16,900) among 313,000 scientific and technical personnel in the United States in 1970, the National Science Foundation reports.

Computer scientists were second highest on the list with \$16,500 and economists third with \$16,300.

The information was obtained by the National Register of Scientific and Technical Personnel, in a biennial survey conducted by the National Science Foundation. The Register indicates that in Spring 1970 the median salary for all of the 313,000 scientists responding was \$15,000, up 14 per cent (\$1,800) from the figure reported in 1968. Salaries ranged from less than \$9,500 a year in the lowest decile to \$24,500 or more in the highest decile.

## Environmental Studies

Environmental Studies, AGI's newly-funded project based in Boulder, Colorado, has produced a packet of materials for use in the Elementary School. The packet, including 25 "Action" cards and an explanatory booklet, are available for \$10 from AGI Publication Sales.

## Buffalo Find Home on Park Ranges

Herds of American Bison still roam at Yellowstone National Park and in three other National Park System areas: Theodore Roosevelt National Memorial Park, N.D., and Wind Cave National Park and Badlands National Monument, S.D. These animals are descendants of the "buffalo" which once grazed throughout the Great Plains and the foothills of the Rocky Mountains.