reply. "But how do you get experience?" asked the young man. "From bad judgment," Old Zeke wisely replied.

Ernie Blackwelder, owner of Blackwelder Manufacturing Company, Rio Vista, California, has made this statement, "Agriculture is in the same position now that other industries have been in for several years. We must now put the right man in the right job, and he must be trained to fill it. Agriculture is no longer the place to solve the social problems of society. We must start upgrading the type of man who is going to do the work. He will no longer be a farm laborer, but will be upgraded to the position of a farm technician. As we mechanize, wages will increase. Therefore, we will need to be more competitive with other industries. As we automate and become more like a factory these types of jobs will undoubtedly become unionized which will result in higher wage rate for the workers. The supervisors of these workers must, of necessity, receive specialized training and their salaries will need to be competitive if the work is to be accomplished properly. It is obvious that not just any worker can be put on a \$20,000 machine and operate it without adequate training."

I am sure that the junior colleges, the state colleges, the universities, and the high school vocational agriculture instructors are all anxious to cooperate with all segments of agribusiness across the nation in establishing the kinds of training programs that will minimize the amount of time that must be spent in training the individual when he gets on the job. I hope that agricultural organizations will not hesitate to call on the agricultural schools to provide short term classes for industrial employees that will help keep them up-to-date with an everchanging agricultural technology. As taxpayers, all industry has the obligation to take time to visit schools, colleges and universities to see if their programs are in keeping with the times. Only by working together cooperatively can we be assured of meeting our competition successfully in the future.

## Judging Contests— A Motivating Factor

F. B. HOUGHTON

Animal Science

Northwest Missouri State College

Webster defines judging as "to form a conclusion, to pronounce judgment or form an opinion upon." A contest is defined as "a struggle for supremacy."

Judging contests can then be described as a struggle for supremacy in forming logical conclusions concerning certain situations or conditions. A livestock judging contest becomes a struggle against active opposition to excel in evaluating the animals as to their merits for the purpose they were

produced to fulfill. The soils judging contest becomes a matching of knowledge and skills to see which team can come the closest to the "official appraisal" in their evaluation of the various soil types in question. The meats judging contest becomes a challenge to prove the superiority of the individual, or team, in appraising the merits of various carcasses and meat cuts.

Any contest becomes a challenge for supremacy. To the average student, a challenge creates more interest in the activity. The more interest the student has in the activity the more active will be his participation, both mental and physical. Learning is active, not passive. To the degree that there is more mental activity, or even physical activity, to that degree will be the learning process. Interest is one of the strongest motivating factors we have in formal education. Without it learning proceeds at a much slower pace or may even cease to occur at all

If we accept the premise that judging contests create more interest in a particular field, then we may conclude that they can be used as a motivating factor in the educational process. Granted that the master teacher may be able to build into a student the internal satisfaction which would motivate him toward acquiring data or solving problems, the fact still remains that for the majority of instructors, every potential motivating factor must be explored for possible use to bring about more effective teaching.

Judging contests might just as well be termed appraisal contests, or contests in evaluation, because they are just that. Aside from their value as interest stimulators, they have merit of their own from a purely educational standpoint.

Judging contests train students in the ability to make logical analyses. Judging is an art based on careful and correct observations. A student must cast aside all prejudiced ideas and approach the task in an honest and open-minded manner. This means that early in his judging activities he must develop a spirit of fairness without prejudice. A student soon learns that when he allows personal prejudices or biased opinions to enter into his judging activities, he basically disqualifies himself as a competent judge. Judging contests aid students in developing the art of being open and fairminded and gives them training in rendering sound judgment which are two basic purposes in education.

Judging contests enable the student to develop independence of thought. The opinions of others, the judgement of fellow students are listened to, but the conscientious student who wishes to achieve a degree of excellence in judging, soon becomes aware of the fact that his own judgment may be as valid. or more so, than the student who is learning with him, and consequently concludes that it is best to be honest with one's self and rely on his own independent thinking. Students who are engaged in judging activities soon see that if they observe accurately, weigh the facts carefully, and make logical conclusions, their "busts" are reduced to a minimum.

Judging contests help train students to have a keen power of observation. This keen power of observation comes about as the result of intense

December 1967 Page 71

application of thought to the merits and differences between the animals or materials being judged. Persistent practice in evaluating judging classes is a sure way to sharpen the mind to a keen sense of detecting difference.

We must not overlook the fact that aside from being a motivating factor, of sound educational value on their own, judging activities have played no small part in the total training of our agriculture graduates which permits them to secure suitable jobs. Many of the livestock buyer trainees, as well as seasoned buyers, are in their present jobs due in some part to the training they received on livestock judging teams. The student with experience in soil judging finds the Soil Conservation Service more interested in his application. Meats, dairy, wool and all the other areas in which judging contests are held provide training that industry looks upon with favor when interviewing prospective employees.

## The Professor of Agriculture In The Expansion of Knowledge

by

Thadis W. Box

Organizational Director

International Center for Arid and Semi-Arid Land Studies

Colleges and universities across the country are literally bursting at their seams. Unprecedented enrollment rates are forcing larger classes, closed circuit television, audio-tutorial systems, and other new innovations for imparting knowledge. This mass production of teaching has led to an impersonalization of the role of the teacher in the profession. More and more of the teacher's job is being done by assistants, either student or mechanical.

These vast hordes of students may cause us to change our methods and techniques, but we have essentially the same mission as always — to expand knowledge. This expansion of knowledge will take several forms.

First, we will be called upon to develop new knowledge through research. Whether he likes it or not, the college teacher of today cannot divorce himself from research. The increasing complexity of our society demands that we must continuously look for new and better ways of doing things. In agriculture, this means that we must develop basic rerearch in the sciences and apply the research to agricultural programs.

Research has been lauded by administrators and government agencies. Promotion and salary increases have been geared to the number of printed pages of highly technical articles a person has turned out. However, many other kinds of research are needed for the college teacher. We should, in fact we must, develop new and better ways of teaching if we are to serve the ever increasing number of

students in our classes. We cannot afford to stay with the old and standard techniques. If the university professor is not doing teaching research, he is soon obsolete.

The second major responsibility of the college teacher of agriculture in the expansion of knowledge is to interpret the research results of others. Many undergraduate students, and even some professors, claim that the scientific and professional journals are too technical. I think it is not the fact that the journal articles are too technical, but the important points of the research may not be known or appreciated by the undergraduate student. It is up to the professor to take points from individual research articles and synthesize them into an integrated pattern that makes sense to the student.

The individual agriculture teacher must read the professional journals and convert the current work from many fields — not only agriculture, but physics, biology, medicine, political science — into a meaningful package for his students. The ag teacher must not be — he cannot be — any less a scientist than those in the "basic" fields. Although he may not be doing plant physiology research, he must be able to understand it and apply it to crop production.

The third major role of the college professor in the expansion of knowledge is that of communication of ideas. Although he may be constantly working to develop new knowledge and is interpreting that developed by others, if he cannot communicate both the technical information and the philosophy behind it to the students, he should not be in the classroom. Let me be quick to point out that the responsibility of the professor is not simply in communicating technical facts and philosophies. He must in some way communicate ideas to his students and give them the enthusiasm to carry the ideas through to projects. He must teach them to be able to think for themselves, to organize material, and to develop thoughts that are their own. If a professor is not turning out students that are greater than he is in his profession, then it is my guess that he is a poor teacher.

The college professor has a responsibility to others outside his classroom. In his expansion of knowledge, he must extend what is known beyond the edge of the campus. Not only should his students benefit from his research and teaching effort, but laymen, industry, and others should also benefit. He should not forget that within the structure of our society, the university is the primary source of knowledge and it is up to him to be able to impart this knowledge to all levels of the community.

It is imperative that the college or university professor be in a position of leadership as far as knowledge is concerned. Regardless of whether the course is in agriculture or art, if the professor has to take his students to business or industry to teach them his subject, he is not living up to his responsibilities. Let me be quick to say that I do not mean that a teacher cannot utilize business and industry in field trips in order to demonstrate to the students how to do certain things, but if he takes his students to a feedlot or a factory and cannot say that this