One way to join student evaluation and program evaluation is to embed assessment in courses. For example, two or three questions on every test that students take could be designated as assessment items. These items would still be used to grade the student, but they also could be pulled together to form an overall test of the program. In evaluating a program, the scores of a particular student would not be important, but the scores of all students would provide valuable information about the strengths and weaknesses of a program. Embedding assessment in courses is the best way I know of to ensure that assessment measures actually reflect what is taught. and it also provides a method of motivating students to do their best, which is a frequent problem in assessment.

My second recommendation is really a criticism of current testing practice. There is no excuse for assessment measures not to be psychometrically sound. Indeed, little of worth can be accomplished if tests of program and student quality do not provide reliable and valid indicators. At best, invalid assessment measures will result in little of value being accomplished. At worst, invalid instruments will result in counterproductive efforts. The preceding is intended to point out that we should not assume that because we are teachers we know how to test. I have to admit that working in assessment has taught me a great deal about how much I did not know about testing when I was a teacher. We need to make greater use of that side benefit of the assessment movement.

The third practical suggestion that I would make about establishing an assessment program is that we all need to keep in mind that measuring what students have learned involves much more than simply testing them. Assessment should include testing, but test scores only provide part of the picture. Assessment must include surveys, performance appraisals, and available campus data so that we will be able to understand why students respond in the ways they do.

As a final suggestion I want to emphasize the importance of not punishing negative results. Nobody likes to be below average, but negative results may be less important than what is done to correct them. In some instances it may become necessary to actually reward negative results (i.e., to provide additional resources for below-average students and below-average programs).

This final suggestion points out what I believe to be the real danger to assessment. In a way it represents reifying assessment: of mistaking the method for the solution and assuming that if a program is assessed, it will improve. Assessment is only the first step, and probably the easiest step in the long and difficult process of improving the quality of American higher education.

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WRAP-UP

The Making of Agricultural Professionals

Robert L. Beck, panelist University of Kentucky

The conference theme: "The Making of Agricultural Professionals" implies that teachers of agriculture do have input in training students to assume a professional role in society. The charge given to this panel was to summarize the conference in terms of its contribution and to discuss how we as college teachers of agriculture can improve our own contribution to "the making of agricultural professionals."

It seems to me that the making of agricultural professionals really is a two-fold process: 1) providing the training and education necessary for a person to function as a manager, for example, after graduation and 2) preparing our students to behave in a professional manner. As I reflect back to the presentations of the past couple of days, it seems to me that most of the emphasis has been on our role in helping students alter their behavioral pattern so that they can act and behave as a professional. Thus, my comments will focus on some suggestions as to how can we, as teachers, instill a sense of professionalism in the student, i.e. how can we (in a practical, on a day-to-day basis) help our students behave/act in a professional manner? I submit to you the following suggestions.

- Act as a professional! Students will respect you for that type of behavior. Make sure our behavior is proper for a professional educator. We can lose the respect of students if we become too "flippant" in our behavior. Provide a role model for them.
- 2 Serve as adviser to student organizations. Teach student leaders to conduct meetings in a professional manner. Industry recruiters expect our graduates to act professionally.

Sumary of panel comments presented at the closing session of the 35th Annual NACTA Conference, University of Tennessee, Knoxville, June 11-14, 1989.

- 3 Require assignments where students learn to act professionally. For example, assign oral reports where the class is considered to be a Board of Directors. Most students may only be a few months away from giving such reports to a "real" Board.
- 4 Encourage participation in extra-curricular activities. Leadership roles in clubs, participation on judging teams, debates, etc. provide excellent training to promote and develop professional qualities.
- Help students build up self-esteem/confidence. How can we as teachers help build self-esteem? Much can be accomplished in our handling of class participation. Encourage participation in extra-curricular activities. We can help through academic advising to ensure a broad educational experience. A music appreciation course or a cross-cultural course may be far more useful as an elective than an additional course in their own discipline.

As college teachers of agriculture, we have unlimited opportunities to help students develop their leadership and professional qualities.

Robert C. Sorensen, panelist University of Nebraska

Our purpose as a panel is to present topics based on conference presentations that would encourage discussion by the assembled participants. Therefore, the following statement's are intentionally argumentative and leading.

A pervasive problem in college teaching is keeping up to date with the available knowledge. We have always been good at updating knowledge in our own disciplines, but often fail miserably to keep up with advances in the science and art of teaching and learning. Jeff Moss reported on research which showed that most academic administrators had a very inadequate concept of contemporary instructional improvement. Current fads in instructional improvement such as computer-assisted instruction, writing across the curriculum, teaching critical thinking, and teaching values have much to offer our students but have limited ability to address the issue of how to make students better learners. Most of us had little or no formal preparation in professional education. Frequently we forget that the center of our activities is learning, not teaching. We must commit the time and resources to interact with educational professionals, attend conferences, and read substantive writings on how to design instruction that maximizes learning and increases students' ability to learn.

Diana Helsel tells us we are in an information age and cannot possibly know all there is to know. I submit that we have never been able to master all that was known. The problems of the information age are not new. A major problem is partly an artifact of computers whose specialty is often the storage,

manipulation, and retrieval of trivia. We must help students learn to collect, evaluate, and use that information which has long term significance, is relevant to problems at hand, and leads to decisions that are humane, sustainable, and produce a better world for us all. Students should be encouraged to take control of the information age rather than be controlled by it.

Lee Humphreys told us that college is a time when young persons need to find out who they are and what they can do - they establish their self image. He also cited research that shows that learning is much greater in a cooperative atmosphere than in one which is competitive. Competition produces losers and losing is not conducive to learning. We must ask ourselves how many of our learning activities are competitive. Perhaps the greatest culprit is the practice of normreferencing (scaling) grades or rigid grade distribution expectations in which selected students may get high grades only if others get low grades. Assessment systems which are criterion-referenced (everyone measured against a standard such as a list of measurable objectives) provide much less stress and a much better learning environment. Many other examples could be mentioned.

Diana Helsel tells us we are living in a world of intense competition. This fact is evident in areas as diverse as international trade, getting or keeping a job, competition for scarce resources, and the conquest for people's money and attention. Howard Hesby and others tell us how important it is to teach students to do what is necessary to get a job, even though what must be done is often pretense and of very limited long-term societal value.

We then come to the bottom line. How do we make agricultural professionals from students who, according to Dr. Humphreys, are by their very nature collaborative, and whose greatest successes are based on self-knowledge, authenticity and a commitment to personal values who find themselves in an inhumane world of competition, game-playing, and commitment to self interest and short-term profits? Do we produce professionals which conform to the system or those who change the system? Is the greater value one of personal gratification or of service to society? These and other questions which must be asked do not have simple answers, but each of us must address them. Ultimately we, as teachers, are students. What is true for them is also true for us. Above all, let us not forget that we, too, learn much better by collaboration than competition and make every effort to join together to address the problems which confront us.

Brad Craig, panelist North Carolina State University

Let's review some of the points expressed by our conference speakers yesterday.

Lee Humphreys

He reminded us that a classroom is a complex matrix of control — "Who gets to use the chalk"? or the nature of authority. Who and what teachers are and should be. The instructor is free to move about — students are "locked" in chairs. Classroom should be arranged in a V shape for a better learning environment. What are your students doing while you are lecturing? Humphreys said probably only 50-60 percent of your students are with you — others are in a fantasy world — dreaming or worried about self.

When we test students, do our "tests" reveal what we value? How do we construct "tests"? In grading students (class) do we compress or spread out — are we comparing students to a standard or to each other? We should grade on an absolute scale not on a curve. Compare competitiveness and collaboration. Collaboration — (interaction, group work, etc.) is better, competiveness is unhealthy and stressful.

Make yourself available to students — in other words "BE THERE", be psychologically prepared. Get to class early so students can ask questions before class begins — probably some they would not ask during class.

Comments by Craig: Dr. Humphrey's presentation was well done and provided us with excellent information regarding the making of professionals. Self esteem is an important part of this development. I've sometimes had parents tell me that "they have not yet decided what they want their son/daughter to be" - forgetting perhaps that the child should have some say in the matter. Also, students have come to my office telling me their parents were saying "why aren't you smart like brother Joe who graduated from medical school." Sometime ago, I read a story about a group of students whose locker numbers were confused with I.Q. They were separated on the basis of locker number and treated academically as though the number was their I.Q. Interestingly they tended to respond that way those with high numbers were challenged and generally did well. Those who had low locker numbers were treated as though they had low I.Q.'s. They weren't challenged and did not perform well.

Mike Jenkinson

Curriculum Revitalization. We are obligated to quality and quantity needs of industry. What should our curricula be like in 2000? He identified the curriculum stake-holders

- -Employer
- -Faculty
- -Students/Alumni
- -Administration/Institution
- -Public
- -Government

Prof. Jenkinson had us put percentage figures on the above list in terms of their influence on revitalization.

Comments by Craig: At North Carolina State, faculty play a major role in curriculum development and reform. Recent actions by the academic administration has resulted in the development of a core curriculum and the development of departmental minors at the discretion of the faculty. More recently, institutions in the University of North Carolina system were given a

mandate to require a double major in a "science" to accompany their specialty teacher education degrees. There was limited compromise. In the end a stronger total teacher education program emerged.

Gary Pike

Assessment of Professionalism Testing - we need to learn about testing. Measuring what students have learned is not merely testing. We need to measure how students would react in a particular situation. Case study and capstone course approach. We should encourage students to visit faculty — get to know them. He mentioned that in a particular situation 47 percent of the students said they did not know a faculty member well enough to ask them to write a letter of recommendation.

Other points made by Dr. Pike:

- Evaluate the teaching learning process on campus.
- Learning is intangible.
- Don't over do assessment. Begin to measure only what is easy to measure.
- Develop "high order" thinking skills.
- Testing only identifies the problem.
- Student evaluation teaching is the property of the teacher not the dean not the president.
- Academic assessment is going to be more and more a part of our lives.

IDEA SHARING SESSION

Oral Presentations

A Course in Professionalism for Animal Science Majors

Howard Hesby
Texas A&M University

Since animal science majors take courses which include little training on developing professionalism, a one-credit animal science course was developed to teach sophomores: 1) What professionalism is; 2) how to become professional; and 3) how to use this professionalism to obtain internships and jobs. Visiting "Professors for a Day" discuss and demonstrate the following topics: writing resumes that obtain interviews; writing cover, thank you, job rejection and acceptance letters; developing interview dining skills; dressing for success; selling oneself in interviews; developing social skills for the corporate cocktail or dinner party; and building a positive mental attitude. Graded homework includes a thirty-minute career analysis and a resume critique session with the teacher: two thirty-minute taped mock interviews with industry interviewers; written answers to interview questions; the actual writing of and sending appropriate letters; and eating a five-course meal at a white-tablecloth restaurant. This course allows students to be more professional and thus more competitive with the 1,100 other animal science majors being graduated each year.