FHA Loans Help Boys Dreams Come True—James Ray Fortenberry, second from right, a vocational agriculture student at Pine High School (Louisiana), discusses his educational training program with, left to right, Robert Jones, FFA County Supervisor; James Ray’s father, Roy Fortenberry; Ronald Knightly, his vocational agricultural teacher; and Marc Hensley, Assistant FFA County Supervisor. James Ray has purchased ten dairy steers to eventually establish a dairy of his own. (Photo from J. C. Albretson, Ag. Ed., Louisiana State University)

A Hedge Against the Possible Year—James Mayes, Jr., guidance counselor, Teacher at St. Philips (Louisiana) technical school points out rice preservation center in his class. (Photo from J. C. Albretson, Ag. Ed., Louisiana State University)

Stories in Pictures by Richard Douglass

Let’s hear it for Clifford Nelson, Vice Chairman of the National’s Editing-Managing Board! The Maryland Vocational Association honored State FFA President, Pete Kull, with a $100 U.S. Savings Bond and Dr. Clifford Nelson (right) with the Outstanding Achievement Award for 1973 and a check-plate. (Photo from James Pope, Maryland FFA Executive Secretary)

NVATA SPECIAL CITATIONS—The November 1973 issue of the Agricultural Education Magazine was devoted to the NVATA in recognition of their continued contributions to the field of agriculture education. The editor, Dr. Roy Ellinwood, University of Georgia, received a special citation at the NVATA Convention in San Antonio for outstanding work as editor and for the special effect in behalf of the NVATA. (Photo from San Antonio NVATA)

Vo-Ag Department Says Thanks—The Delta Vocational Agriculture Department at Muncie, Indiana awarded an Outstanding Service plaque to a local Oldsmobile dealer for providing the department with courtesy cars to transport some of the 250 students to FFA events and field trips during the year. Pictured, left to right, are Bill Goette, Sales Manager; John Tomlinson, owner of John Jackson Chrysler-Plymouth; Fadly, Delta FFA President, and Rayce Cates, director of Vocational Agriculture at Delta High School. (Photo from Rayce Cates)
The potential adult clientele of our agricultural programs is estimated to constitute 17.6 percent of the U.S. workforce, which amounts to 6.4 million workers. The adults served by our programs is approximately 257,000. Only one out of every 25 potential adult enrollees is served by our programs. The percent of potential enrollees who need and can benefit from our programs is not known. Unknown also is the percent of that group who want or could be caused to want instruction. The number is unquestionably high enough to cast doubt upon the wisdom of serving the small group of farmers who want and need. If the adult enrollment record of your school were examined for the past 10 years, how many different names would you find on your enrollment sheet? That question is especially directed to teachers who have taught in the same school for that many years. Are you guilty of starting a young farmer program as a young teacher and then growing up with them as an adult farmer program, thus requiring the satisfaction of the requirements of an adult population program? The problem seems analogous to the alleged habit of Bellini, Pennsylvania, who had satisfied his requirement for a supervising farmer program with six chicken hens through four years of high school and became concerned after noticing that he had failed the senior year that his farming program might die of old age before he graduated.

From Your Editor... WHOSE NEEDS?

How many different individuals have your adult program reached in the past ten years?

How many years have you had the same group in your farm management program? Have they been in seven or eight years and you cannot seem to wear them out in order that a new group that has a greater need for farm management instruction can be helped? What did this group do to deserve continued farm management service? Do they pay more taxes or have more influence?

A physician has his regular patients, an agricultural machinery dealer has his regular customers and a lawyer has his special clients. There is a difference. We are public servants. Our adult programs, except for token tuition and fees, are supported by state and federal funds and by the needs and interests of the instructor or other education personnel should not unduly limit the number or kind of clientele who are served within agriculture as broadly defined.

If we serve the needs of individuals, are we simultaneously serving the needs of agricultural business and industry? If we serve the needs of the individual and the industry, are we also best serving society? The needs of individuals, of industry, and of society are interrelated and the interrelated problem is not so close that we can ignore the focal points of our efforts. Recent attention to the role of the agricultural industry in bringing about a favorable

Economic enterprise is industry-oriented. The American occupational structure is industry-oriented. Whether self-employed or earning a salary or wages, workers identify first with their industry. What is specific, each worker is part of a particular establishment within a type of industry. The Bureau of Labor Statistics, in "Toward Moratoriums on Classification" published in 1960...

A publication in 1971 of the U.S. Bureau of the Census, "Classification of Industries and Occupations" (5) provided essential material for an interagency study (10) aimed at identification of a matrix of agriculture, natural...
The Bureau of Employment Security has a strong interest in this project as an aid to counseling and job placement of the unemployed, underemployed, disadvantaged, and minority persons who can profit from training. Business knowledge and skills. The U.S. Department of Agriculture expects to use the data to focus its research on activities to increase rural worker skills and income and on consumer marketing services.

It is anticipated that some states, and many districts, will design and systematically complete real studies of occupations in industries that will need new and better programs for workers in their areas. The U.S. Department of Labor, Workforce Investment Act (WIA), provides jobs training and detailed instruction. To clarify basic terms, their definitions were:

1. Job: a group of positions identified in major task categories sufficiently similar to each other to be covered by a single analysis.

2. Position: a collection of tasks making up the work assignment of a single worker. (The number of positions that the worker holds is the number of workers in the job group.)

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ATTAINING PERFORMANCE OBJECTIVES IN A MEATS UNIT

James LeCours
Uly Community H.S.
Michigan

The goal of any Agriculture Education program is the development of modern and relevant occupational skills by the agricultural student. To achieve this goal, we first ask ourselves if our curriculum is relevant. After satisfying our first question, we then ask if we can evaluate my students realistic tools?

Veterinary Agriculture and long experience in practical training in the educational process we believe that the employment of experimental objectives with student participation can make a difference for the outcome. A classroom program in a contest for each type of livestock. Finally, a commercial sale is held. The poison received are realistic for a day's work. Each student involved is seeing the "red-world" at work and is gaining marketing experiences in the market place. As a result of this activity, the student can see his animals graded, and also observe how these grades affect the price he will receive for his animal. Placing the market sale activity in the performance objective terms, we must start at the time the student purchased the animal. Some examples of performance objectives could be: Select from a group of steers at a feeder sale a steer or pen of steers that will grade at least choice according to USDA a grader.

Based on the outcome of activity at the market sale, it would be easy to evaluate the student on his success at this skill. We have with this activity something that is "real"; there is no substitute for realism, it is relevant to the student and he can "see" the results. This type of experience may be more practical and more realistic than a fair sale due to the fact that the prices received for animals at the fair, and a first place award does not always guarantee "good quality". It only tells who's best in the class.

A method which may give a more realistic view to the conventional fair judging would be a carcass class. We could also dress the animal and grade the carcass according to USDA standards. Very few students ever see the animals dressed and at a fair sale. If the goal of this instruction is to provide the consumer with what they want, the student must see what he is producing.

To do a complete job and provide excellent fact, each carcass would be held for live animals on Monday at the fair. Members could be involved in judging the animals before the official judging and then have the judge give his placings and reasons. Later in the week, an education program could be held for the dressed carcass evaluation.

An opportunity could be given the opportunity to judge the carcasses first. Afterwards, the members could be involved in marketing experiences with the carcasses. For instance, "Grand" each carcass to within one half of the accepted USDA grade when given five beef carcasses. Another activity that we have at our disposal is the FFA Meat Judging contest. Under the new rules in the contest, we could draw upon experiences in the market place and the fair carcass classes. The "Meat Judging Handbook" by the National Livestock and Meat Board is an excellent reference for the new judging "carnes". In addition, I have used the "Meat Judging Handbook" and the book of "Meats" as well as tape slide series on meat judging for the new "carnes". "Meat Judging and Grading." For an evaluation of our meats unit, (Concluded on page 16)
Do Objectives Confuse You?

Harold R. Matteson
Teacher Education
University of Wisconsin-Madison

Performance objectives, behavioral objectives, drill objectives, instruction objectives, psychological objectives, and curricular objectives are just some of the terms encountered in literature to describe objectives. One problem that has been around for a decade or so is the need to invent a new term for using the old objectives. It may be that many vocational education educators at all levels are confused because the problem is not that of trying to describe various terms; rather, the problem is how to use the old terms correctly.

If educators raise the question, "Is a way of looking at objectives right, at least in part, adequate to our problem?" The remainder of this article will be devoted to the discussion of this question.

Objectives: What Are They?

At first sight an educator may find the term anathema, or as some people would say, it is confusing. It seems to be the nature of the clientele toward which my instructional program is directed. 1) What levels of behavior am I seeking from my students? 2) Am I an instructor, when teaching animal nutrition, stating as one of his objectives, "That each student must be able to balance a ration for his flier's daily herd"—then he must decide upon the types of learning experiences that will develop adequate knowledge and comprehension of this subject before his students can be expected to balance the rations. 3) What criteria will I be using for evaluation? 4) What evidence will I have for determining student success?

These and many other questions concerning the teaching of objectives should arise regarding what should be included in the total instructional program: the relationship between what is taught from day to day, from month to month, and from year to year; and the relationship between the occupation and the daily program. It is my contention that these questions are not considered by a vocational agriculture instructor because his major focus is developing a curriculum that produces a "product" which will pass the regional accrediting agency or a District accreditation agency or a District accreditation agency and get the students ready to have a job. The "product" is generally found buried in a file cabinet or gathering dust on a bookshelf.  

A Framework for Analyzing Objectives

As we plan curriculum and instruction in vocational education in agriculture, we generally deal with the types of objectives. These are program objectives, course and/or unit objectives, and lesson objectives. The major problems encountered as we begin to develop each of these objectives are deciding how a program objective should be different from a course or unit objective and how a course or unit objective is different from a lesson objective.

To alleviate these problems, at least in part, I am suggesting criteria which might be used as guides for differentiating between objectives at the three levels. These criteria include specific, covert versus overt, nonbehavioral versus behavioral, and student-oriented versus teacher-oriented. A program objective tends to be general, covert, nonbehavioral, and student-oriented oriented in nature. A lesson objective, on the other hand, is specific, overt, behavioral, and student-oriented oriented in nature.
THE ROLE OF PROGRAM EVALUATION IN PROGRAM PLANNING

Planning requires that decisions be made. Program evaluation provides the needed information, because the program evaluation is the process of gathering and analyzing those data necessary for approving or altering programs.

D. E. Eisen
Program Planning

Planning, both annual and five-year, is essential for improving vocational education. However, we must know where we are before planning can be properly accomplished. Again, program evaluation provides this very important information, for the purpose of program evaluation is to improve the educational program.

Program evaluation is a cooperative undertaking of all those concerned with improving vocational education. This means that the local teacher as well as the administrators must be actively involved. This also means that students, former students, employers, and the lay public must have a part in the evaluation of the local vocational education program.

The extent to which the needs of all youth and adults are being met must be determined. The three major aspects of vocational education—orientation and exploration, occupational preparation and consumption, and homemaking education—must be considered. Difficulties—such as overcrowding, overcrowded and handicapped, and adult students to be served. Program evaluation, therefore, must be a systematic procedure which places emphasis on the total offerings of vocational education by the school district (lives). As well as the individual vocational programs.

Current planning strategies include a five-year plan which is updated each year. A program evaluation should be conducted each year to provide the data for appraising the alternatives necessary to update the five-year plan. The annual program evaluation, due to its time-consuming nature, cannot be a thorough, isolated procedure. This does not mean, however, that such an evaluation should not be conducted. Once each five-year, a comprehensive program evaluation should be conducted which delves into the philosophy and objectives of the program, the extent to which the objectives are being met, the curriculum, the teaching-learning process, the use of advisory councils, the research and evaluation activities, the learning resources, the supplies and equipment, and the facilities.

If program evaluation and planning on an annual basis are to be accomplished as stated above, we must begin with program standards in the form of guidelines. The present vocational education curriculum is rarely comprehensively evaluated. A representative of the situation should be included in the evaluation of the educational objectives. The program becomes an important part of the evaluation procedure. Each committee should have a supervisory council to assist in the preparation of the recommendations for the next evaluation.

Through the use of these guidelines, committees can be analyzed and evaluated. The process involves assessing the relative period of the recommendations. The evaluation involves a process formulation which the evaluator be well prepared for the evaluation of occupational education programs.

The preparation phase is considerable duration of time for evaluation, the cost/benefit ratio becomes an estimate of value. The cost/benefit ratio is calculated as follows:

\[
\text{Cost/Benefit} = \frac{\text{Benefits}}{\text{Costs}}
\]

If the ratio is greater than 1.0 there is a positive benefit. If there is more than one alternative program the one with the greatest positive ratio is chosen.

The cost/effective model includes the cost and benefit figures in dollars and the non-economic benefits in raw form. Non-economic benefits include such factors as the training knowledge, employer’s rating of program, holding power of program, and increased motivation for further schooling. The formula for the model is stated as follows:

\[
\text{Cost/effectiveness} = \frac{\text{Benefits}}{\text{Costs}} + \text{Non-economic factors}
\]

Careful consideration is given to the process and the product of occupational education programs. The product refers to the inputs of the teacher, the student and resources in the instructional program. Obviously, the product is a variable that is not easily controlled as possible should be maintained. It is essential that the teacher be well prepared for the instructional program. Otherwise, the students will be at a disadvantage. It is also essential that the training program activities be well structured.

The cost/benefit formula is still beneficial for the student should be able to advance in his chosen occupation by additional schooling if he so desires.
An Urban Agriculture Programs

Parker V. Foster
Program Headteacher, Vocational Education
San Diego City Schools

Agriculture, as the only "raising" of the six traditional elementary or secondary school disci- plines, was started in 1947 in the San Diego, Cali- fornia school district. The concept that this time was that a program would be initiated at two centralized locations in the city; one of them located in a basically middle class neighborhood and one in a neighborhood of a more modest eco- nomic and sometimes different cultural background. These two centers would be known as an extension center and would each admit students from the six high schools within its own service system. The fact that one of these cen- ters was located on a site contiguous with the city's only "zoned" school led to special problems of its own - all since resolved.

The point is that agricultural, horticultural, and related programs were made available, for the first time, to all senior high school students within a large urban community and to the most populous in the state of California. To say that the first years were an instant success and equal to any achieved in the most populous city in the state of California. To say that the first years were an instant success and equal to any achievement in the state of California. To say that the first years were an instant success and equal to any achievement in the state of California. To say that the first years were an instant success and equal to any achievement in the state of California.

A form that has been used as a means to evaluate the effectiveness of educational programs is the post-occupational educational programs in agriculture. The way in which the evaluation is conducted will have a great impact upon the student's decision to enroll in the program. Other pertinent questions can be structured to analyze the student's choice of courses.

The Second Year Student Program Report completed by students in April was designed to assist those students about to graduate the opportunity to appraise the program. This report concentrated on the curriculum, assessment, and evaluation of the field of agriculture. A self-inventory of personal qualities and knowledge of the technology in the program was included. Which components of the program do the student believe to be the most and least important and to be a part of a successful program? Most students have completed an internship or on-the-job experience, so the assess- ment is based on participation in the academic program and realistic occupa- tional experience in the technology. How do the student's goals and expectations on job hunting, percent of students who will have full-time em- ployment after graduation, and strengths and weaknesses of the job placement assistance available to students differ across programs?

An analysis of information collected from the First and Second Year Student Reports will provide a valuable information regarding the modification of program elements. The input of important result in program changes which might help reduce the number of future dropouts. On, the survey may indicate that students are being trained for successful entry into their chosen occupations after partial completion of the instructional pro- gram.


The Graduate Survey was completed in July by former students who had graduated during the previous year. The 14-month lapse between graduation and completion of the questionnaire allowed the individual to do further training and possibly gain a job. The experience enabled him to assess the post- secondary agricultural program in relation to his success or lack of it. (Concluded on next page)
Some of the items resulting in valuable educational research are concerned with occupational status and responsibilities, experiences and problems in growth, and the market for graduates. These experiences and problems in professional and technical capacities. Items were designed to directly or indirectly assess the relevance of the educational program to the occupational needs of students.

The Employer's Report of Graduates was distributed so that the employer would evaluate the post-secondary program and graduates at the same point in time as the former student would complete the Graduate Survey. The employer was asked to respond to items concerned with: technical competence and personal qualities: a comparison of the performance capabilities of the graduate with other employees; additional training provided on the job; and employment matters, such as salary, expected salary, and anticipated job title in five years.

Employers and graduates provide extremely valuable answers to questions such as: Are facilities and equipment used in the post-secondary program relevant to the needs of today's Industry? Which components in the program need to be changed to allow graduates to be more successful? Do graduates possess the desirable personal and technical competencies? These questions dealing with program process and product must not be ignored if post-secondary programs are going to continue to grow and to be successful in their unique educational mission.

The process discussed and illustrated should be considered one component of the total evaluation program. Additional assistance from local evaluation teams and external evaluators from the profession is required for a full fledged assessment. The data collection process, however, embodies several of the widely accepted principles of evaluation. (1) The philosophy, goals, and objectives of the post-secondary agricultural program serve as a basis for the data collection activity. 2) Instrument items are designed to assess and appraise the processes and product of the program. 3) Evaluation is continuous. 4) All persons concerned or affected by the program should participate.

Information collected should be shared with the program's advisory council. The data will provide tremendous assistance as the council carries out its evaluative function. The evaluation information can be extremely useful in providing rationale for program changes and justification for alterations.

Is your program producing quality of product needed in the market? Which components of the program should be changed to attract more students? How do they perceive their program? Are the programs associated with your program effective? For the answers and other pertinent questions your program, plan to start the data collection system the October.

J. Dale Oliver Vocational and Technical Education Virginia Polytechnic Institute and State University

Furnish information in several areas:
1. Student enrollment by program and program information. This includes the name, address, social security number, grade, sex, and age of secondary students. The school in which the program is offered is identified and the program is designated by the course and Office of Education Code. Students who are handicapped or handicapped are reported as such and it is indicated if the program is especially designed for these students. Co-operative students are so designated. At the end of the school year, termination or completion information is collected for each student. The information for adults is collected in summary form.
2. Follow-up of former students. Informations is collected regarding the status of former students and their attitudes toward the program. More specifically, this deals with whether the students are employed, are in the military service or are continuing their education. For those who are employed, data are collected on the relationship between their job and their training. The wages they are earning, the location of the job and how well they're training prepared them for the job. Finally, the former students are asked to evaluate their school with regard to selected items.
3. Personnel resources available. This includes professional personnel, their training and qualifications. Such information may currently be available in the state department of education of each state and simply requires adaptation to the needs of vocational education.
4. Facilities and equipment available. Information is needed on the number of students that can be trained in a given facility, the quality of the facility, the availability and quality of the equipment, and the present and potential utilization of these resources. A study is underway to develop procedures for gathering such data. Additional work is needed on methods for collecting valid and reliable information on the needs and interests of students, especially secondary students.

The system under development in Virginia will provide information that is primarily useful at the state level. However, much of the information will also be available for local decision making. MIS development in Virginia as well as in other states has been greatly aided by the electronic data processing equipment. A system with components such as the described above should provide all the information needed in determining if the state-wide goals and objectives have been met. The system provides information in the three major categories which is needed for planning, evaluation, and decision making. (1) The facilities of the state and available (facilities, personnel, and dollars), (2) the needs and interests of students, and (3) the demand for manpower.

Vocational education faces many challenges in meeting the needs of its present and potential clientele. A properly developed MIS should provide the information needed for improved decision-making and thus a greater probability that the needs of the clientele will be met.
A small scale counts contest could be run. Performance objectives could be increased by selecting for feed efficiency, a "given 25 retail cuts of meat, identify each by naming the individual cuts according to accepted meat standards."

Another objective might be: Evaluate and rank four hams from most desirable to least desirable in edibility. A procedure outlined in the Meats Evaluation Handbook. Still another might be: Determine the yield grade of a carcass based on the dressed weight and the dressed carcass within one full USDA yield grade. Many more objectives could be developed for a unit on meat.

To be a successful producer of meat, a farmer must be more involved than just producing it. He must be able to select good feed, maintain a good feed program and know when the animal is finished so it will bring the top price. With a complete follow-up, more data could be accrued on production measurement. Rate of gain, feed efficiency, and feed cost percent and return percent could be used to compare feeding methods, selection of animals and management. With the addition of grades and carcass data, a more complete set of factors could be evaluated and improvement in yield grade could be obtained. The outcome of this unit of instruction is a knowledge of selecting, managing, marketing, and marketing the business.

We have long pledged our agricultural educators on rural situations in our instruction. The University of Minnesota College of Agriculture is concerned with the development of needed skills by the student, we must see that educational opportunities are adequate.

Realistic, practical instruction, by using realistic production objectives leads to greater student development and improvement in the skills by the agricultural student.

In (69), a new kind of institution has evolved high enough in the eyes of the University of Minnesota Technical College in Crookston. College education is centered on the slogan that education is not the three-thirds of its program in technical education course in general education. This two-year college has shown steady growth in the past 20 years.

The college has been organized to serve as a sister institution, the University of Minnesota Technical College in Warreng, has started. It is an appropriate time to evaluate the outcome of the Minnesota college system, for the people of the state. This study was completed in the summer of 1977. This study was completed in the summer of 1977. This study was completed in the summer of 1977. This study was completed in the summer of 1977.

In the study, the college placement office conducted a survey intended to query every graduate (N = 130) to secure information about: 1) Their occupational status. 2) Their source of employment (if employed). 3) Their community in which they had secured employment (if employed).

Questions concerning all grad--

Approximately one-third of the migration from the prepared-for-career area occurred within the natural resource field. This might be explained from the fact that the natural resources field is traditionally lower paying and opportunities for advancement are somewhat limited. According to job titles, it appeared that only 12 percent of all graduates were employed in the mid-management or semi-professional level.

According to the data pertaining to salary, the average initial salary of the University of Minnesota, Crookston 1977 graduates was determined to be acceptable by the college after considering the facts that (1) the sample included many 1968 and 1986 graduates, (2) the college is comparatively new and just beginning to acquire a reputation, (3) 18% of the sample was female, and (4) many of the graduates were employed in rural settings. Progress within the career path was indicated by the fact that the average graduate at the time of the study was making $625 per year, an

A Follow-up of Technical College Graduates

Anthony Knopp

University of Minnesota Technical College Crookston

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DOES AG INTEREST MEAN AG ENROLLMENT?

Samuel M. Curtis, Teacher Education The Pennsylvania State University

Eighth graders declared interests in taking agriculture courses in agricultural subject matter does not necessarily result in enrollment in 9th grade. Of 2576 eighth graders, a study found 130 students in 18 Pennsylvania school systems choosing agriculture courses at the Agricultural and Biological Interest Inventory during the winter of 1971. 459 indicated a desire to enroll in one or more courses in agriculture science. Six months later, 221 students actually enrolled in agriculture courses. It is an attempt to ascertain reasons for this situation, the interest scores of students responding "yes" and "no" to future enrollment in agricultural courses are compared to the interest scores of those who actually enrolled. Furthermore, teachers were asked to identify from among those 221 students enrolled, those considered to be educationally disadvantaged on the basis of reading scores and in class performance. In total, 153 students were identified by teachers as belonging in the educationally disadvantaged category. Teachers and schools in this survey are participating in a 3-year project to improve instruction for the educationally disadvantaged.

This data must be observed in light of the survey norm for interest in agriculture — a score of 116 or higher, moderate interest; 83-115, moderate interest; and less than 82, low interest. In total, 221 students showed interest in agriculture courses. Of these 221 students, 32 were observed that responded "yes" to agricultural courses while the "no" responses were checked. The "yes" responses accounted for 72% of the total interest category. Part scores for animal, plant, and business interests were aggregated to arrive at the total norm.

The enrollment of 221 eighth graders indicating a desire to take agriculture courses was further discussed. Several possible plans of action exist. One deals with curricular structure of the agriculture programs in the 18 schools used. Most of these schools agriculture programs offered on an all or nothing basis. It is possible that students could be enrolled for one period per day in ninth grade, for two periods per day in tenth grade, and for three periods per day in eleventh grade. No doubt some students were enrolled in the three areas in courses that did not attract interest. Finally, the female-female mix has to be evaluated. Of the 2576 students surveyed, 1018 were boys and 1558 were girls. The 8th grade students' agriculture courses were surveyed by the second author. In summary, better agricultural education programs are needed.

According to information secured from the college Admissions Office, 54% of the 1972-73 students admitted to the college came from communities of less than 2,000 people, 79% from cities less than 10,000 and only 2% from cities with a population of 10,000 and more 30% were in communities of less than 2,000, 60% were in communities of less than 10,000, and 19% were in communities of over 20,000. Seventy-five percent of the employed 1972 graduates remained within Minnesota with one-half of those who left the state indicating that they stayed in the Dakotas. On the basis of these data, it is evident that the college is fairly successful in placing its graduates within rural areas.

In summary, college-technical education in Minnesota is accountable in terms of student outcome. Students who come from rural areas find positive results for their courses. Many indicated that their interest scores were high for the college, and the large majority of these positions are in rural America.

Another consideration is the large percentage (69%) of the total ninth grade agriculture students who do not consider educational advantage. That is, two or more years behind their grade level in basic skills and unable to succeed because of this deficiency. This estimation differs sharply from the 19 percent educationally disadvantaged reported by high schools in Pennsylvania in 1971.

It is equally important to note that the interest scores of educationally disadvantaged students entering ninth grade agriculture were different from their classmates. Hence, it is evident that for 1972-73 that the ninth grade agriculture students in the 18 schools surveyed have a high percentage of educationally disadvantaged students and a high interest in agriculture. One can only speculate that the more favorable attitude toward disadvantaged students presented by this project has resulted in increased enrollment by such students.

The effect of the teacher's occupation on student performance and choice was also observed. These results are tabulated in Tables 2 and 3. Previous studies have indicated that father's occupation and teachers affect the course offerings at high school vocational orientation. This has led to some students interests and occupational choises. In this study, the correlation of student interest in agriculture as evidenced by the part scores and total scores on the Agricultural and Biological Interest Inventory to father's occupation was not significant, ranging from -.06 for mechanic part score to -1.6 for animal part score. Some interesting results do show up, though, when the interest scores of students showing an agricultural interest are stratified by father's occupation. Three categories of father's occupations were used: farmers, agricultural non-farm and non-agricultural. Information about father's occupation was collected from 1902 of the "yes" respondents. Significant differences occurred in student interest scores among the 1209 students responding "yes" to agriculture courses when scores are stratified by father's occupation. All four part scores as well as the total scores were significantly higher for those students whose fathers were farmers. No significant differences in scores were apparent among the students whose fathers were employed in non-farm agricultural occupations and non-agricultural occupations. Comparisons were much different for the students who actually enrolled in agriculture classes in ninth grade. Fathers' occupation had no bearing on the scores for all three groups. For all three groups, the student interest scores averaged in the high interest area. There were no significant differences among the three groups.

Fifty-five of the 100 students whose fathers were farmers chose to enroll in agriculture courses in ninth grade. The mean interest score for these students was 129.5 while the score for the 100 in the sample was 127.8. For the non-farm agricultural students, only 10 of the 87 students enrolled in agriculture. The mean interest score for these 10 was 121.3, considerably higher than the 105.2 recorded for all students in this category.

In the non-agriculture occupations group, only 10 of the 101 students expressing interest in an agriculture course enrolled. The mean score for these 10 was 105.4 compared to 101.3 for the total group.

Thus, it can be concluded that among students who responded "yes" to agricultural enrollment, those who enrolled had higher interest scores than those who did not enroll. The (Concluded on next page)
The student with the knowledge and skills required of him at the job entry level? Do they give him the special competencies he needs in order to find gainful employment? These are good questions and they need be answered honestly and objectively.

Most, see only a few of us whose backgrounds are so firmly anchored in the soil—production agriculture—whom their hearts refuse to accept what some minds tell us is true, are ready to concede that new programs and new methods of instruction are needed. Replacements in the world of work are different from what they used to be and vocational programs must change accordingly. What is the basis of such change and where should it begin?

The Beginning Point

Like those of other states, agricultural educators in Florida have been concerned with the problems of curricular relevancy and better methods of teaching in quite some time. Operating in a vast array of largely untested legislation, however, and conditioned by the student with the knowledge and skills required of him at the job entry level? Do they give him the special competencies he needs in order to find gainful employment? These are good questions and they need be answered honestly and objectively.

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Evaluation of Beginning Agricultural Education Teachers

Keith E. Finos
Teacher Education
Washington State U.

Performance of the beginning teacher in agricultural education programs is an important criterion to the satisfactory development of his teaching career. As many teacher educators in agriculture well know, the performance of the beginning teacher during the critical first year is a very significant measure in the developing career of the young teacher. If he has had a "good" year, the beginning teacher looks to the second and subsequent years with increased poise, confidence, and enthusiasm. A satisfactory performance during the first year of his teaching experience also builds a very favorable relationship between the beginning teacher and the school administrator as well as other staff members in the school system. Continued employment in the school district is usually assured following satisfactory performance during the first year teaching experience.

Evaluation of the performance of the beginning teacher is a necessary and essential task. But who should evaluate the teacher? What criteria evaluate the teacher? What additional data may also be considered in the evaluation? The Agricultural Education staff at Washington State University was concerned with answering these questions.

The Study

Washington State University in cooperation with the Northwest Council for Vocational Education, Olympia, Washington conducted a study to evaluate the performance of beginning teachers.1 The evaluative instrument that was developed consisted of fifteen selected performances or categories of teacher activities.

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### TABLE 1

**EVALUATION OF SELECTED PERFORMANCES OF BEGINNING TEACHERS IN AGRICULTURE AND NATURAL RESOURCES EDUCATION**

<table>
<thead>
<tr>
<th>Performance</th>
<th>Excellent</th>
<th>Slightly below average</th>
<th>Slightly above average</th>
<th>Fairly average</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicating and articulating with the school administrator and instructional staff</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>2. Individual accountability and personal responsibility</td>
<td>10</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>3. Demonstrating competence in the agricultural subject matter</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>4. Planning and directing instructional programs</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>5. Establishing and maintaining student discipline</td>
<td>16</td>
<td>20</td>
<td>22</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>6. Developing material and teaching student attitudes, moods, and motivations</td>
<td>20</td>
<td>22</td>
<td>24</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>7. Organizing and working with advisory council</td>
<td>22</td>
<td>24</td>
<td>26</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>8. Developing programs of student recruitment, career exploration and assessment, and program promotion</td>
<td>24</td>
<td>26</td>
<td>28</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>9. Providing guidance, placement, and follow-up of students</td>
<td>26</td>
<td>28</td>
<td>30</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>10. Disseminating instructional materials</td>
<td>28</td>
<td>30</td>
<td>32</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>11. Keeping departmental records and making assigned reports</td>
<td>30</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>12. Administering departmental programs and coordinating the activities of department</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>13. Planning and establishing professional growth and development</td>
<td>34</td>
<td>36</td>
<td>38</td>
<td>40</td>
<td>42</td>
</tr>
</tbody>
</table>

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### TABLE 2

**Rank Order and Scores of the Evaluation Items as Replied by High School Principals and Beginning Teachers**

<table>
<thead>
<tr>
<th>Item</th>
<th>Rank Order</th>
<th>Score</th>
<th>Rank Order</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>2.60</td>
<td>11</td>
<td>2.60</td>
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<tr>
<td>2</td>
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<td>25</td>
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<td>25</td>
<td>2.60</td>
</tr>
</tbody>
</table>

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1. See Table 1 for teacher performances evaluated with these teachers.

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1. Demonstrating competence in the agricultural subject matter.
2. Keeping departmental records and making assigned reports.
3. Administering, supervising, and coordinating the activities of the department.
4. Planning, organizing, and advising FFA activities.
5. Developing and maintaining instructional facilities.
6. Planning, organizing, and advising vocational activities.
7. Demonstrating competence in the agricultural subject matter.

---

The performance items with significantly high scores on the self-evaluation were:
1. Organizing and working with advisory councils.
2. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
3. Developing and maintaining instructional facilities.
4. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
5. Developing and maintaining instructional facilities.
6. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
7. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
8. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
9. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
10. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
11. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
12. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
13. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
14. Developing programs of student recruitment, career exploration, and awareness, and program promotion.
15. Developing programs of student recruitment, career exploration, and awareness, and program promotion.

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The study offers several implications for improving our teacher education programs. Most of us tend to teach much the same way we have been taught, perpetuating our procedures in spite of recognized models. Moreover, under the stress of time we tend to follow the same, least resistance, doing the most convenient and quickest way, forgetting that where skill learning is concerned, this is usually not the way. The practice applies here and the practice must be the kind that will prove the teaching required for acquiring good habits in performance rather than had ones.

Those and other related areas carry implications for better teacher education programs. For instance, there may need to be increased employment of public school master (elementary) teachers. The public school teacher may need to be trained in our program and then returned to the school as a part of the program. This would provide the beginning teacher with the opportunity to be trained in the methods required for the teaching of agriculture. The beginning teacher would then be able to return to the public school and be able to apply what he has learned in the program.

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Agricultural Education

August, 1974

Number 2

Stories in Pictures
by Richard Douglass

Evaluation in the Judge's Eye — The President of the Stidofie FFA Chapter (Louisiana) accepts the award for the Chapter's Grand Champion Hogs. The award was made at the State Spring Livestock Show. (Photo from Dr. J. C. Asheton, Louisiana State University, Baton Rouge.)

Results of Career Education Planning. Ray Chapman, 12, showing results of his research project to raising first grade students, a "razing hormone" into a plant which produces a strong meaty flavor. This is part of Harbor Heights Elementary School's project. (Photo from Abe Cerrocho, Vocational Education Program, Washington State Council for Occupational Education.)

Planning pays off in Agricultural Mechanics. Vocational Instructor teams up at Tri-County High School in Nebraska. Two scaled, half-sized models were used to make a stand in support metal being cut in the bandsaw. (Photo by Richard Douglass)

Self-evaluation for self-improvement with the help of the computer. Nebraska student teachers code videotape of their teaching and get an instant analysis. (Photo by Richard Douglass)

Planning and Evaluation Pay Off — The Virginia Vocational Association's OFFICE SERVICE AWARD was presented to Carl S. Thomas, retired supervisor of Vocational, Technical and Adult Education, State Department of Education. The presentation was made by B. W. Remley, retired state supervisor of Agriculture. Mr. Thomas is now a part-time supervisor of vocational agriculture schools in West Virginia. He also served as a state supervisor of vocational agriculture while serving in the United States Navy. (Photo by W. H. Weyman)

Developing Technical Competence

Theme—TEACHER EDUCATION

Plus—Index to Volume 46