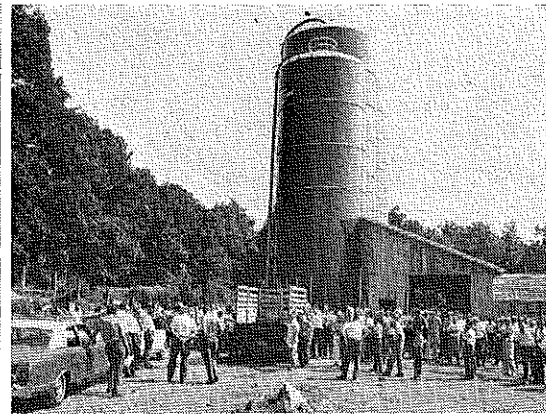
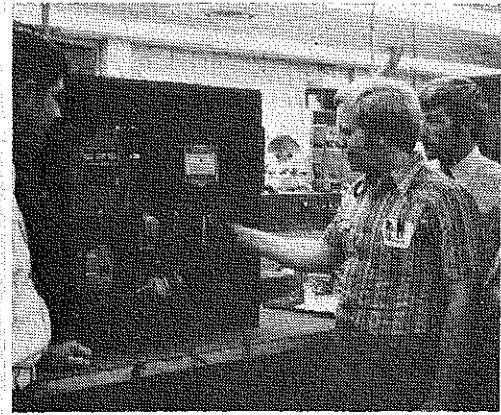


So Much To Do

So Little Time



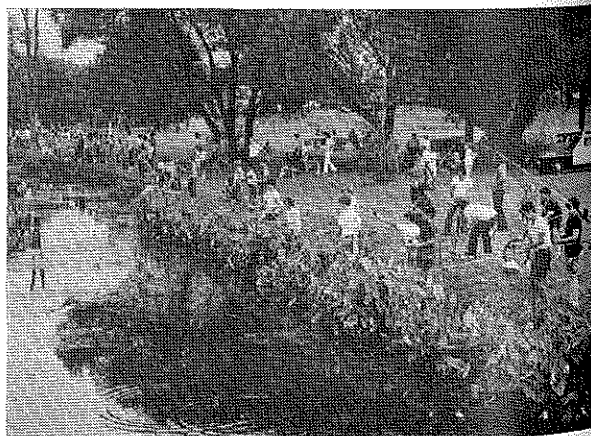
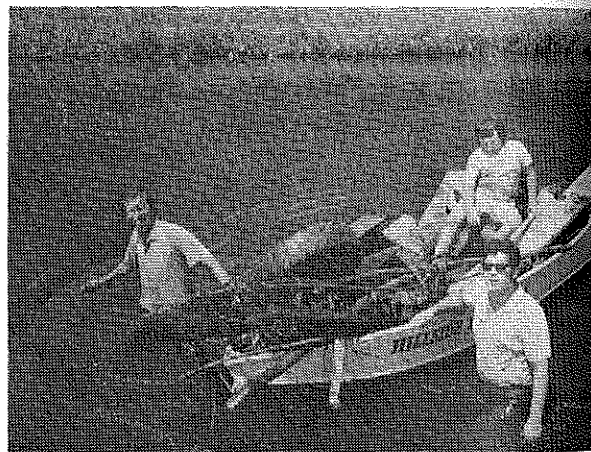
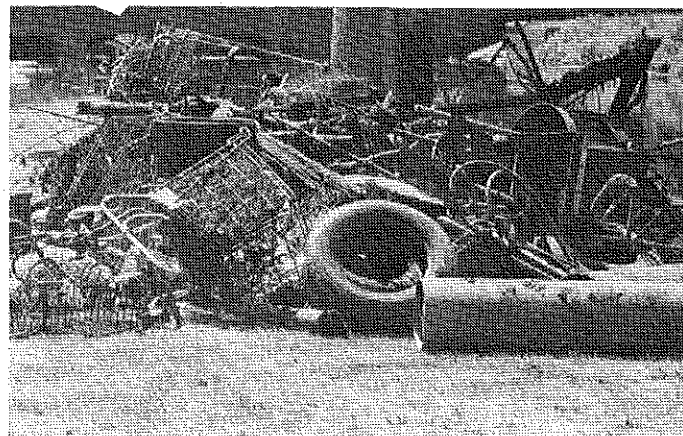
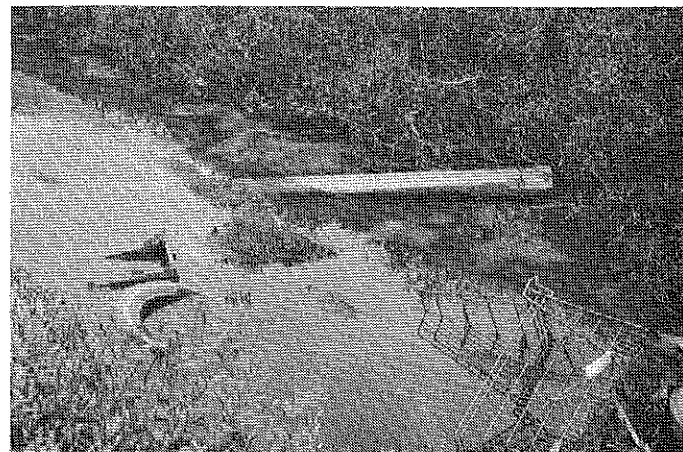
Agricultural Education

June, 1974

Number 12

Stories in Pictures

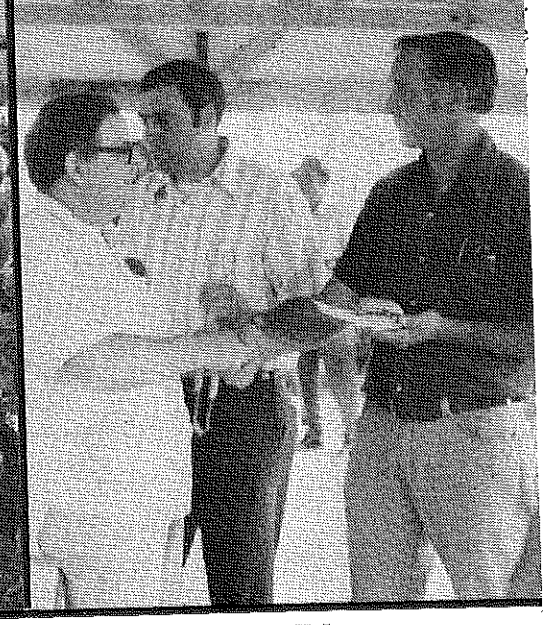
by Richard Douglass



Attend In-Service Workshops (above left) — These South Dakota Vo. Ag. Instructors are getting up to date on the new "Ground Fault Interrupter" circuits. (Photo from Gary McVey, Dakota State University) Set Up Young and Adult Farmer (above center) — Summer is an ideal time to do the "work" on upcoming tours and field days. (Photo from Meyers Jr. Ag. Ed. Supervisor from Virginia) Improve Teaching (above right) — Dr. Larry Miller, (second from left) Virginia Polytechnic Institute, is using video tape to demonstrate the Flander's Interaction Analysis system of observing teaching. Cooperating teachers have considerable impact on teaching. (Photo by Jasper Lee, Virginia Ag. Ed. Dept.) Improve America (below) — This sequence of pictures depicts the efforts of the Elizabeth River Conservation and Beautification Committee to clean the river of pollution and debris and make a habitation for pan fish. The photos won first place in the category of the 1973 Keep America Beautiful/Kodak Awards. (Photos from Kodak News)



THE RESULTS OF SUPERVISION



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Theme—ADMINISTRATION AND SUPERVISION
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Magazine



EDPRESS Vol. 46 June, 1974 No. 12

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Send articles and pictures to the Editor or to the appropriate Special Editor.

COVER PHOTOS:

These Michigan Ag Ed Leaders (top) are helping articulate local school programs and branch area Career Centers. Individuals in the picture are from left to right, Ed Stankey, T&I Supervisor, Branch Area Careers Center; Fred Hinkley, Agricultural Team Leader and Coordinator, Branch Area Careers Center; Dr. O. Donald Meaders, Professor, Agribusiness and Natural Resources Education and Chairman of Ag. Ed. Magazine Editing-Managing Board, Michigan State University; John Dygert, Director of Vocational Education, Branch Area Careers Center; Richard Karelse, State Supervisor of Agricultural Education, Michigan Department of Education. (Photo from Richard Karelse, State Specialist, Michigan)

Scottsbluff Nebraska Ag Teacher, Bob Hytrek (lower left photo) shows Glen Nicklas, Supervisor in Ag Ed how to use a popular underarm deodorant to clean grease pencil marks from the overhead projector. (Photo by Richard Douglass)

(Concluded on page 268)



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Editorials

CONSULTANTS, SUPERVISORS, DIRECTORS

From Your Editor . . .



Martin B. McMillion

The terms "consultant, supervisor, and director" by no means encompass the lexicon of terminology for those whose job it is to help the local instructor of agriculture do his job better. Adding "administrator," "principal," "superintendent," and "bureaucrat" may nearly complete it. If we look to some of the other English speaking countries, we would find in use the term "inspector," which is perhaps the most authoritarian of the terms. It is not my intent to rank

all the terms as to how democratic or authoritarian they are. I do want to call attention to the proximity of persons holding these titles to where decision making takes place.

The local director of vocational education whose duties are described in an article in this issue by Holt holds a relatively new position which did not exist in the days when state supervisors "ruled with an iron hand." With all the expertise at the local level, it is reasonable to have more local control, room for innovation, and decision making within the guidelines decided upon in Washington, D.C. and the state capitols. Local supervisors, as described by Mutchler in this issue, are also located where the decision making is taking place in Vocational Education Planning Districts.

As Paul Day indicated in this month's guest editorial, local supervisory personnel need to be reimbursed for helping with the decision making responsibility to permit state supervisors the time to assume a leadership role through management by objectives. The need for developing standards for program evaluation and accountability was emphasized.

An example of these types of national or state stan-

dards or guidelines for developing and evaluating programs is reported in this issue. It is the result of the excellent leadership of one self-proclaimed bureaucrat from Washington—there's one of those terms again. (The report of the 1974 Kansas City Seminar is recommended for your study. Rarely does one find more ideas per inch of column.)

Most of us in agricultural education are aware of the weakening of the positions of state supervisors. Various contributors to it are: 1) holding the numbers of state supervisors constant while the number of teachers and students increased, 2) designating supervisors as consultants and telling them not to go to local schools unless requested, 3) assigning supervisors (consultants) to *levels* of instruction across fields rather than according to *fields*, and 4) paying low beginning salaries for state supervisory positions. The salary situation was made apparent to your editor when a doctoral candidate reported that he had applied for a state supervisory position in two states and a local vocational directors position in one of the states, and the highest salary was for the position of local vocational director. Are you surprised at where the expertise is located? Lest the supervisors think a teacher educator is getting delusions of grandeur, I hasten to say that it is not uncommon for over half of the agriculture teachers in a state to be making more money than the beginning-teacher educator.

Regardless of status or position, we are all in the agricultural education profession together. All the positions and roles are important. We cannot do without any of them. Let us resolve to come to the aid of each other. When the ranks of state supervisors, area supervisors, teacher educators, or teacher associations are weakened for any reason; I believe we can adapt to keep agricultural education strong.

—MBM

Guest Editorial . . .

Paul M. Day
Minnesota State Supervisor



Paul M. Day

Frequent laments heard at any gathering of supervisors of Agricultural Education include: inadequate state and federal categorical funding, the elimination of subject oriented staff in the USOE, the absence of a standard curriculum model, reduced state staffs, recalcitrant school administrators, uncooperative state directors and a continuing shortage of qualified instructors.

There is no doubt that these are legitimate concerns. The question is, "are those of us responsible for supervision of Agricultural Education developing alternatives to these challenges which will insure the continued delivery of quality programs of vocational education in agriculture?"

NEW TRENDS IN SUPERVISION

The continuing practice of formulating and passing resolutions requesting categorical funding, discipline oriented staffing, massive state staffs etc., is no longer practical nor feasible. The hard brutal facts are that we must change our method of supervision or perish. These needed changes must include the ability to manage by objective. Agricultural programs must be defended on the basis of measurable objectives, not because it has always been done that way. We must prepare objective plans that indicate how many will be served, what competencies will be developed, and at what cost. This is the language that legislators and administrators understand.

It is paramount that in-service education be provided for instructors to create an understanding of management by objectives as well as to develop their ability to utilize

(Concluded on next page)

these management techniques.

Supervisors must learn to delegate the decision making responsibility to subordinate staff members. No longer can we supervise by "the shadow-over-the-door method." The days of massive state staffs are gone forever. We must develop and reimburse local supervisory personnel if we are to continue to have excellence in our programs.

We must develop and reimburse local supervisory personnel if we are to continue to have excellence in our programs.

Supervisors must support and actively promote the continued development of capable effective leadership from the agriculture teachers organizations. Professionally-minded teachers have demonstrated that they will develop competent, responsible leadership within their ranks if we provide them the opportunity. We should utilize state and federal funds to keep reimbursing teachers attendance at AVA, NVATA, or other national and regional seminars or conferences.

As supervisors, we must listen to the teacher's suggestions for improving Agricultural Education. We should encourage innovativeness in teaching methods and curriculum development. As the late G. R. Cochran stated, "All good ideas in Agricultural Education need not originate in the state supervisor's office."

Supervisors must assume a leadership role in developing standards for program evaluation and accountability. Teachers, teacher educators, and advisory committees must be involved in establishing the criteria against which they will be evaluated.

In an era of declining rural population, we must seek alternatives in the pre-service education of our instructors. We must identify, recruit and develop with the cooperation of teacher educators, in-service education for industry experienced instructors if we are to continue to maintain and expand our programs.

A closer liason must be established with the state directors of Vocational Education. It would seem desirable to involve state directors in our regional seminars and state Vo-Ag teachers' conferences.

Are we really communicating with our state directors? Can we justify program expansion on the basis of outcomes measured against program budgets? Are our program objectives designed to meet manpower needs of the total agricultural industry? Have we developed programs which can face competition from other disciplines for available funds? Have we made a commitment to providing education for adults and post-secondary students?

Can we document to school administrators our needs for trained agriculturalists? Do we have the documented evidence which justifies our needs? Have we encouraged the development of curriculum which will prepare students for employment in the total industry of agriculture? Have we sought the advice of industry in developing our curriculum and in the evaluation of our graduates?

Have we supported the changes in the FFA which will make it responsive to the needs of all of its members? There are things that are certain in this era of accountability; first, there will be no return to the "good old days" and second, a strong FFA alone will not insure continued funding. If the instructional program is not relevant and designed to prepare students for work, the FFA alone will not justify programs.

I feel that we have available the tools to insure continued leadership for the profession. We must apply these new techniques to supervision to insure the continued delivery of high quality vocational education.

COVER PHOTOS:

(Continued from page 266)

Expanding Programs Bring New Students (Center)—A few years ago the chance of a young lady being enrolled in high school agriculture was very slim. Today, thousands of students are enrolled in new and expanding programs of agricultural education in Virginia. These programs are designed to enroll students formerly excluded from enrollment. (Photo by Jasper S. Lee, Virginia Polytechnic Institute and State University)

Bobby Conner (right), an officer of the Southside Virginia Young Farmer Association, expresses appreciation to Marshall Pease, Executive Secretary of the Franklin County Chamber of Commerce. The Chamber hosted a lunch during the annual Area Young Farmer Tour. More than 100 Young Farmers and their advisors from two local Young Farmer organizations visited three Franklin County farms and two agricultural industries during the June tour.

Themes For Future Issues

- July — Program Planning and Evaluation
- August — Teacher Education
- September — School Organization and Articulation
- October — Instructional Technology
- November — Improving the Profession — the Job and the Teacher

- December — Better Teaching and Learning
- January — Urban Agricultural Programs
- February — Programs in Natural Resources
- March — Utilizing Resources in Teaching
- April — Informing the Public
- May — Teaching the Disadvantaged and Handicapped

A LOCAL SUPERVISOR

James Mutchler
Local Agriculture Supervisor
Milan, Ohio



James Mutchler

full-time Farm Business Planning and Analysis instructors, and 18 full-time and 6 part-time local agriculture education supervisors.

The number of state supervisory staff has not increased with the continued increase of teachers and students enrolling in agriculture education programs. The role of the state supervisory staff has shifted from supervision of local departments to areas of leadership, program development, curriculum and instructional materials, administration, and working closely with the local agriculture supervisors and VEPD administrators.

With area vocational centers becoming established throughout Ohio, it seems logical that a local agriculture supervisor could work out of these centers and be in very close contact with the local teacher as well as the specialized teacher in the vocational center.

In the EHOVE (Erie, Huron, Ottawa Vocational Education) District, 14 local schools send juniors and seniors to the vocational center for the indepth training in 26 different vocational programs including 5 in agriculture. Seven of the 14 local schools have 4-year vocational agriculture programs serving students in grades 9 through 12. With over 500 students enrolled in high school agriculture programs, a need for close supervision and coordination with the 16 instructors has become a necessity.

The primary function of the local supervisor of agricultural programs is to improve the instruction in programs for high school and adult students enrolled in approved departments within the VEPD. The supervisor becomes part of a team that brings teachers with needs together with teachers who can provide instruction that is specialized and in facilities appropriate for the learning process.

The objectives and responsibilities of a local supervisor vary according to the policies of the local board of education and administrative procedures. However, the objectives of most supervisors in Ohio are:

1. To direct and coordinate the total agricultural education program in the VEPD.
2. To provide leadership and assistance in the development of the best possible curriculum for the program being offered.

Direct supervision of teachers for agricultural programs in Ohio is moving from the State Office to supervision within the Vocational Education Planning Districts. This local supervision is closer to where it is needed. At present, there are 108 Vocational Education Planning Districts (VEPD) in Ohio. Located within these districts are 339 local vocational agriculture departments, 555 full-time high school instructors, 17

3. To provide leadership and assistance in the improvement of *teaching techniques* which result in improved learning processes.
4. To assist with the *recruitment and selection* of teachers, orientation of new teachers to the school system and other teaching situations, and recommend desirable in-service training for the teachers' professional growth so that the best possible instruction will result.
5. To provide the instructional staff with *instructional materials*, equipment, and *supplies* that will improve their teaching performance.
6. To work in close cooperation with local *administrative personnel* which will complement and improve the total educational program of that school.
7. To provide leadership and assistance in local *research* efforts where it is needed to identify educational needs and improve the instructional programs.
8. To plan with each teacher a *budget* which will provide the necessary equipment, supplies and materials for an effective teaching program.
9. To be a functioning part of a desirable *public information* program for the school, community, and VEPD; and maintain, as an individual, desirable public relations with all concerned.
10. To provide for effective *guidance and counseling techniques* for local teachers and those in the area vocational center and to enable them to recognize student needs, including placement and follow-up after graduation.
11. To *evaluate* continuously the total vocational agriculture program with representatives of industry, administrators, and teachers in terms of stated objectives so that improved instructional procedures will result.
12. To assist the teacher in understanding *student evaluation* and development of an effective student evaluation program.
13. To work closely with cooperating teachers so that *student teachers* will acquire the experiences and information necessary for them to become successful teachers of Vocational Agriculture.
14. To provide a team effort with all other vocational education services represented within the area vocational school and the VEPD.
15. To coordinate the local programs with the programs being offered in the area vocational center.
16. To develop a 5-year plan for a complete program of agriculture education with all the instructors in the VEPD.

(Concluded on page 273)

The Role of Local Supervision

J. David McCracken
Teacher Education
The Ohio State University



David McCracken

Local supervision of vocational education programs is receiving increasing emphasis as the role of state supervision trends toward program management. According to Parks,¹ successful supervisors "Are democratic, people oriented, well informed, are able to see situations as others do, practice group centered leadership, possess a scientific and analytical attitude, and help others to use their energies creatively." Local administrators and supervisors of vocational and technical education hold an important decision-making role in program development and operation. They often determine whether or not a new innovation or practice will be implemented or rejected.

Local supervision for vocational education programs in agriculture is also developing. In Ohio, local supervisors of Agricultural Education provide administrative leadership, supervision to teachers, and program coordination functions within Vocational Education Planning Districts.² Local supervisors of Agricultural Education programs are specifically responsible for coordinating the development, administration, and continuing revision of a five-year plan for their district. As a minimum, the plan must include projections of manpower needs, numbers of students to be served, programs and activities to meet the needs, and placement and follow-up of graduates. Other duties include providing assistance in curriculum development, adult education, evaluation, advisory committee utilization, FFA program development, in-service education, and communications.

Major Problems in Local Supervision

Because of the increasing responsibilities attributed to local program administration and supervision and because of the importance of supervisors in the diffusion and adoption of new practices, I conducted a study³ which had as one of its purposes the identification of critical problems of local administrators of vocational education. The problems which were identified reflect some of the major functions of practicing local vocational education administrators and supervisors.

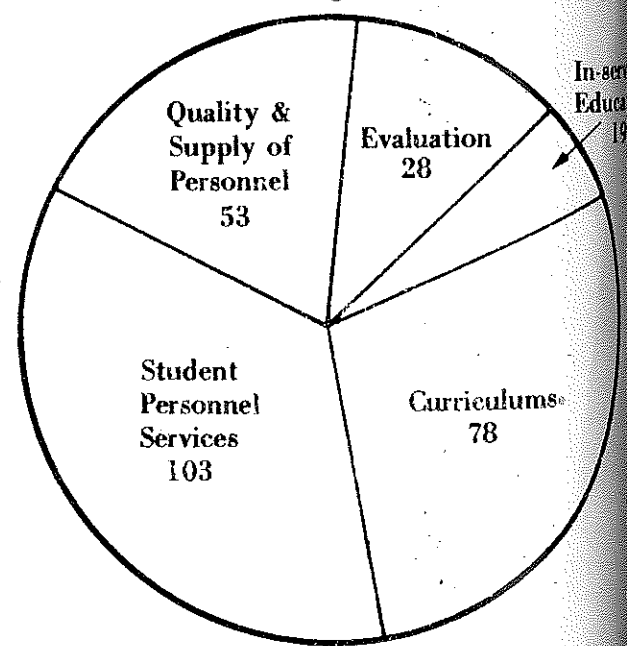
For the purposes of the study, the local administrator of vocational education was defined as the person responsible for organizing and administering a minimum of three program areas in vocational education. Alabama, Missouri, North Carolina, Oklahoma and Wyoming were selected for the study by a stratified random sampling technique. Six local administrators were randomly selected within each of these five states. The 30 participants agreed to assist in the study. The low number of participants and their concentration in five states provided a recognized limitation in the

generalizability of the results of this study.

Data were collected by 15 telephone interviews with each participant over a 31-week period between November 1971 and June 1972. Each respondent was interviewed for two weeks. At least one major problem or concern was identified for each respondent in each interview. The problems were later grouped for analysis purposes. The telephone interviews yielded 611 major professional problems. A mail questionnaire was also administered during this time period. The median age of local administrators was 48 years and their median years of experience at the local level of vocational-technical education was 14 years. They had completed 6.3 years of post high school preparation and served 584 secondary, 225 post-secondary, and 563 students.

Major problems of local administrators of vocational education, in order of frequency of occurrence, were those related to instruction, administrative leadership, financial and educational change. Only two problems were reported which concerned teachers and only one related to critical social issues. Little relationship was noted between the subject of the major problems and the time of year when the interviews were conducted. Those problems related to instruction required the greatest amount of time and effort in seeking information and resolving the difficulty, while those related to educational change and finance required the least.

Figure 1



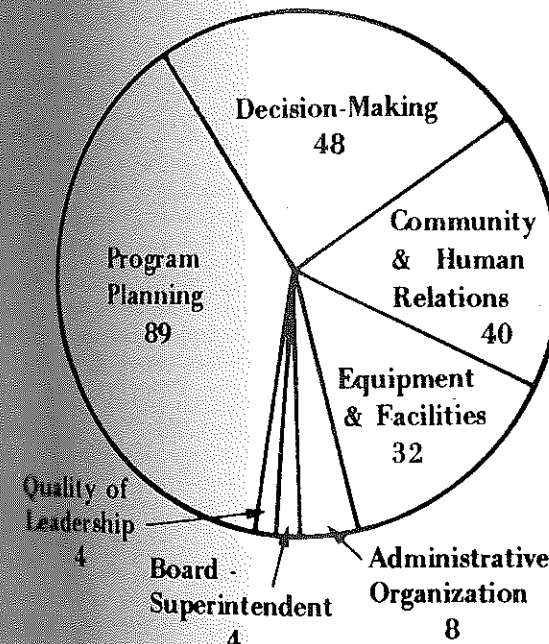
INSTRUCTION

THE AGRICULTURAL MAGAZINE

The problems identified as relating to instruction are shown in Figure 1. Of the problems relating to instruction, the greatest concern was in the area of student personnel services. Curriculum ranked second and quality and supply of personnel ranked third. Some problems were also reported that related to evaluation and in-service education. Some major problems within the area of student personnel services were: selection of students for programs, student placement, student discipline, and student follow-up after graduation.

Problems relating to administrative leadership are shown in Figure 2. Most problems in this area related to program planning. Other areas receiving considerable emphasis were decision-making, community and human relations, and equipment and facilities. The major finance problem area was in obtaining Federal and state aid.

Figure 2



ADMINISTRATIVE LEADERSHIP

Local supervisors generally perceived little need for information for use in problem resolution. However, when information was needed, moderate to substantial amounts of time were used for information-seeking.

Functions of Local Supervision

The problems which were identified in the study show which functions of supervision were causing the most difficulty. They do not, however, provide a total picture of the role of the local supervisor. Parks⁴ summarized 15 tasks

required in local supervision:

1. Direct and coordinate the total vocational education program for which he is responsible at the local level.
2. Provide leadership and assistance in the development of the best possible curriculum for the students being served.
3. Provide leadership and assistance in the improvement of teaching techniques.
4. Assist with the recruitment, selection and orientation of instructional staff personnel and in the development of appropriate in-service training activities.
5. Assist the instructional staff with the selection of teaching materials, equipment and supplies.
6. Work in close cooperation with local administrative personnel to coordinate and improve the total educational program.
7. Provide leadership and assistance in local research endeavors in identifying vocational education needs and improving the instructional programs.
8. Assist each teacher in planning a budget which will provide the necessary equipment, supplies and materials for an effective educational program.
9. Be a functioning part of an effective public information program and maintain, as an individual, desirable public relations with all concerned.
10. Cooperate with guidance personnel in providing for effective guidance and counseling techniques in the testing, placement and follow-up of vocational students.
11. Evaluate continuously the total vocational education program with the administration and staff in terms of stated objectives so that improved instructional procedures will result.
12. Assist the teacher in developing an understanding of student evaluation and an effective student evaluation program.
13. Promote a team effort with all other vocational education agencies represented within the community.
14. Develop annual and five-year plans for a complete vocational education program.
15. Participate in and encourage teacher support of district, state and national vocational education professional organizations.

Remaining Concerns

Supervisors are often placed in an ambiguous role. Their position requires a broad range of skills. Their job functions are often more extensive than can possibly be accomplished. It is therefore necessary for priorities to be set based upon the needs of the school districts being served and the particular expertise of the supervisor who is employed. The supervisor then can give major effort to the more critical tasks.

1. Darrell L. Parks. *Local Vocational and Technical Education Supervision*. (Columbus: The Ohio State University, ERIC Clearinghouse on Vocational and Technical Education, 1973).
2. *Manual of Operation: Ohio Agricultural Education Service*. (Columbus, Ohio: State Department of Education, Division of Vocational Education, 1973).
3. J. David McCracken and Wilma B. Gillespie. *Information Needs of Local Administrators of Vocational Education*. (Columbus: The Ohio State University, The Center for Vocational and Technical Education, 1973).
4. Darrell L. Parks, *op. cit.*

ROLE OF THE HIGH SCHOOL VOCATIONAL DIRECTOR

Raymond A. Holt
 Director of Vocational Education
 Anderson County School System
 Clinton, Tennessee



Raymond A. Holt

Public demand for quality vocational education programs has placed emphasis on accountability for the director at the local level. Complicating the situation, however, is the divergence of role expectations of various groups with which the local director must work.

In recent years the number of new local director positions has been increasing. Some have developed without the benefit of relevant past experiences or research findings. Descriptive data are needed for upgrading present local directors and training prospective directors.

A limited number of studies have been completed that investigated the characteristics and/or qualifications, duties and responsibilities of the local director. A need exists to determine or define this role.

A related study* was completed in 1973 that attempted to determine the role of the local director of vocational education at the public school district level in the State of Tennessee as perceived by reference groups. The investigation sought to identify the following elements: (1) characteristics and/or qualifications in terms of educational level, teaching experience, occupational experience, and types of certification; (2) the need for specialized training programs and certification; (3) overall role functions; (4) role functions by the categories of administration and supervision, curriculum and instruction, community interaction, public relations, professional activities, and research activities; and (5) a determination of the most important functions in the ideal role.

PROCEDURE

The study reported here included 264 individuals comprising reference groups of local directors; secondary school principals, vocational teachers and superintendents in school

*Holt, Raymond Andrew. "The Role of the Director of Vocational Education at the Public School District Level in the State of Tennessee." Unpublished doctoral dissertation, The University of Tennessee, Knoxville, June, 1973.

systems employing directors; and state staff and teachers in vocational education. Random samples were selected from the population of principals and teachers using a variable size statistical table. One hundred percent of population for all other reference groups was utilized.

A tentative list of functions, compiled from literature and research, was submitted to a jury of specialists for validation. Only those items relative to role functions which had an 80 percent consensus were used in the Likert-type instrument. Additional items were included in the instrument to gather information about characteristics and/or qualifications. All data were collected by mail.

FINDINGS

One objective of the study was to ascertain characteristics and/or qualifications actually possessed by local directors prior to their acceptance of the job and to determine perceptions by reference groups relative to desired or ideal minimum characteristics and/or qualifications. Indications were that the minimum acceptable qualifications were: (1) educational level—the Master's degree, (2) teaching experience—six to ten years, (3) occupational experience—three to five years, and (4) type of certification—either secondary certification with one or more vocational endorsements or the same type plus related training for the position. Most local directors had met the minimum perceived requirements prior to their acceptance of the position.

Prevalent among all reference groups was the feeling that specialized training programs should be established to more effectively prepare individuals for the position of local director. A need for the establishment of an endorsement program for local director relative to professional certification was indicated.

Sixty-five functions were listed as being essential to the overall role of the local director. An inconsistency in understanding the local director's actual role was indicated by a large number of significant differences between reference group perceptions. With respect to the overall ideal role, however, the perceptions were more consistent. The overall actual and ideal roles were shown not to be congruent.

Reference group perceptions indicated that the local director actually places his highest priority on professional activities and administration and supervision. Least priority was placed on community interaction and research activities. In the overall ideal role, the data indicated that highest priority is placed on functions dealing with administration and supervision and least priority on community interaction and research activities.

Significant differences existed between the means of actual and ideal roles when the functions were categorized. These categories of functions where significant differences existed were: administration and supervision, curriculum and instruction, community interaction, and professional activities. No significant difference existed for public relations and research activities.

Overall Most Important Ideal Role Functions

There was a high degree (80 percent) of group consensus regarding the most important functions that should constitute the role of the local director. Most functions were administrative and supervisory in nature. Community interaction and research were the only categories for which functions were not perceived as "most important."

Although it was felt that all 65 functions were important, the highest-ranked 25 functions were included as indicated by composite means. The respective order of these functions are as follows: (1) work cooperatively with local, state and federal agencies in developing local vocational programs, (2) provide assistance to school administrators in initiating and operating vocational programs, (3) keep the public informed about the vocational program, (4) promote and demonstrate good public relations, (5) explain goals and scope of vocational education to school administrators and others, (6) plan and prepare the annual vocational budget, (7) translate community and manpower needs into meaningful vocational programs, (8) work cooperatively with persons and groups in developing a total educational program, (9) provide for continuous evaluation of vocational programs, (10) plan and organize the orientation of new vocational teachers, (11) assist in designing and equipping of new facilities and/or programs, (12) keep up-to-date on new occupational methods and materials, (13) prepare or assist in the preparation of annual and long-range goals or programs, (14) plan and/or conduct in-service education for vocational faculty, (15) assist in the selection of vocational faculty members, (16) coordinate programs in the school district, (17) attend local professional meetings, (18) belong to professional educational associations, (19) attend state professional meetings, (20) prepare reports and/or proposals for program reimbursement, (21) establish and utilize an advisory council for the total vocational program, (22) request services of state staff and consultants where and when needed, (23) approve budget requisitions for supplies and equipment, (24) maintain contact with employment agencies, and (25) promote coordinated program between vocational programs and other subject matter areas.

RECOMMENDATIONS

The following recommendations were made:

1. Local directors of vocational education apparently need to make some adjustments in their performance relative to the degree of importance attached to different functions in their present roles.
2. Careful and serious consideration should be given to the establishment of a certification for the position of local director of vocational education such as now exists for principals, supervisors and superintendents.
3. Efforts should be made by state departments of education and by teacher education institutions to design

training programs specifically for local directors of vocational education. Both pre-service and in-service programs are needed.

4. A local director position should be established in each school district. In systems where limited resources and programs would make the employment of a local director economically unfeasible, cooperative efforts should be made between systems to provide this educational service.
5. School systems considering the employment of a local director should give attention to factors such as educational level, teaching experience, occupational experience, vocational field(s) specialization and preparation in the areas of administration and supervision, public relations, curriculum and instruction, and research. Professional growth of the individual is also an important factor.
6. Principals, state staff, superintendents, teacher educators, and teachers should keep in closer contact with the local director to be more aware of his actual role and difficulties. Local directors, on the other hand, need to be in closer contact with the various groups which they serve to become more knowledgeable of the important functions they should fulfill and whether or not they are meeting role expectations.
7. Additional research should be undertaken to determine the relationship between roles of local directors of vocational education in public school systems and their counterparts in area vocational-technical schools, community colleges, technical institutes, or even in other curricular or administrative areas on the school district level.
8. Follow-up studies similar in nature to the present study should be conducted at specified intervals to insure that practices of local directors are congruent with new concepts and developments in vocational education.
9. Other states or regions should conduct similar studies. If consistent results are found, sound and valid generalizations can be made concerning the role of the local director.

The type of leadership exerted by local directors directly influences the quality and accountability of programs of vocational education. It is important that the local director be extremely cognizant of emerging practices and developments and of group expectations if he is to effectively fulfill his designated role in the educational system. ◆◆◆

(Mutchler—from page 269)

17. To develop an advisory committee with all the instructors for each instructional program that will help plan, make suggestions, and offer ways to improve the curriculum to meet the changing needs of job requirements in the community.

The trend is toward more local supervision in Ohio and indications are it will continue in this direction. With more area vocational centers becoming established, it seems logical that teachers can receive closer supervision and that more local leadership can be offered to help plan and improve programs in Agriculture Education. ◆◆◆

Guidelines for --

**DEVELOPMENT AND EVALUATION OF
YOUNG FARMER AND ADULT PROGRAMS**

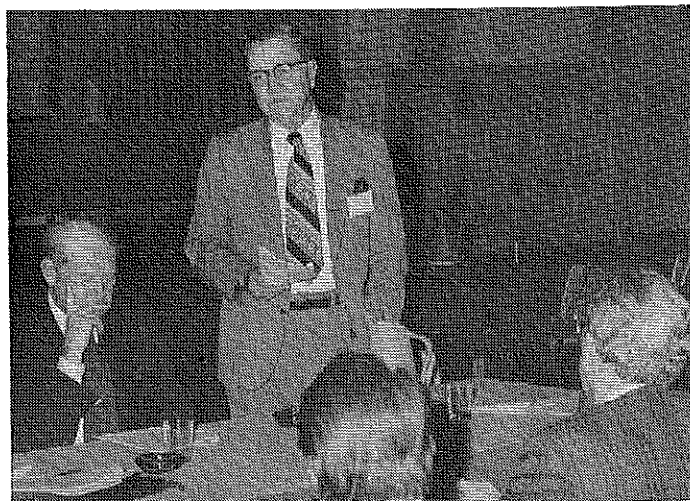
**in Agriculture/
Agribusiness**

Clarence E. Bundy
Teacher Education
Iowa State University

The tremendous need for production of food and fiber makes adult vocational education in agriculture and agribusiness an absolute essential for the welfare of all Americans. Each farmer in 1973 produced food for 51 persons. The United States and Canada control 80 percent of the productive land and food in the world.

In one year this nation became one of food shortages rather than one with surpluses. In 1973, 25 percent of the nation's food production was exported. We have a world market we have never had before. Food production in other countries cannot keep pace with population growth. Exports of food and fiber amounted to \$13 billion in 1973; \$20 to \$25 billion in exports are anticipated in 1974. Increased production is a must. According to Secretary of Agriculture Earl Butz, "We cannot afford to lose any farmer because of poor management and inefficiency."

With 17.4 percent of U.S. workers employed in agriculture/agribusiness, and 6.4 million of them needing instruction, agricultural education personnel are faced with a monumental task. In 1973, 14,896 veterans were enrolled in Cooperative Farm Training classes and less than 275,000 workers were enrolled in classes for young and adult farmers and agribusiness employees.



A portion of one of the eight task forces deliberating over the guidelines for development and evaluation of adult education in agriculture/agribusiness at the 1974 Kansas City Seminar.

In March, 1974, 165 leaders in agricultural education from 43 states participated in a national seminar¹ in Kansas City, Missouri to consider the new responsibilities for adult vocational education in agriculture/agribusiness. Much enthusiasm was expressed by the group and guidelines were developed by eight task force committees. Each committee established major thrusts, or goals, and action steps associated with a major phase of agriculture/agribusiness education for adults. A list of the guidelines with space provided for assessing status of accomplishment begins on the next page.

A Minnesota study indicated that for each dollar invested in family farm management education \$4.19 returned. Each year of instruction added \$500 profit. An adult education program for farm operators can return as much as \$1 million of business to a community. Think the returns of 10,000 or more such programs for workers in agriculture/agribusiness!

Much effort was expended by seminar participants in developing the guidelines. It is hoped that agricultural education personnel at all levels will adapt them to their situations and use them in evaluating and expanding existing programs, and in developing new programs. Many of the thrusts and action steps can be carried out by individual teachers of young farmers and adults. Some must be implemented by vocational directors and administrators, while others are the responsibility of teacher educators. State department of education personnel will find the guidelines invaluable in evaluating individual programs of adult agriculture/agribusiness education and in counseling administrators and teachers concerning improving existing programs and in developing new programs.

Teacher educators will find the guidelines excellent source materials in providing instruction in young farmer and adult agriculture/agribusiness education, both at pre-service and in-service levels.

¹ National Seminar for Leaders of Young Farmer and Adult Vocational Education Programs in Agriculture/Agribusiness. Sponsored by the Office of Education in Cooperation with the Department of Agricultural Education, Iowa State University. H. Neville Hunsicker, Division of Vocational and Technical, USOE, Program Chairman; Harold R. ... Department of Agricultural Education, Iowa State University, Chairman.

GUIDELINES FOR CONTINUING EDUCATION
IN AGRICULTURE/AGRIBUSINESS
Goals and Action Steps

Developing Communications Program Concerning Agriculture/Agribusiness and Role of Adult Vocational Education

Thrust A. Employ public information persons at state and national levels.

- *1. Establish national public information advisory committee.
- 2. Explore possibility of USOE and USDA joint appointment.
- 3. Present proposal for state public information position to appropriate state personnel.
- 4. State director seek legislative action when necessary.

Thrust B. Inform local, state and national administrators concerning objectives and needs of adult agriculture/agribusiness education.

- 1. Appropriate person at each administrative level to inform decision makers concerning role of adult/young farmer programs.
- 2. Inform decision makers concerning national and international importance of American agriculture.

Thrust C. Identify sources of accurate and current information.

- 1. Establish system to coordinate dissemination of data at all levels.
- 2. Make maximum use of farm, trade, census, DOL, and other organizations and agencies.
- 3. Public information persons share information with each other.

Thrust D. Determine types of information to be disseminated.

- 1. Give priority to quality subject matter.
- 2. Emphasize efficiency of American agriculture.
- 3. Describe role of agricultural education.
- 4. Explain international agriculture pacts.
- 5. Relate current legislation to agriculture and agricultural education.
- 6. Describe population growth and food needs.
- 7. Illustrate capital needs in agriculture.
- 8. Emphasize interdependence of agriculture and the total industrial complex.
- 9. Explain changes in agriculture due to social, economic and technological factors.

Thrust E. Use effective methods in implementing the communications program.

- 1. Establish an agriculture/agribusiness communications network.
- 2. Assign individuals and groups specific responsibilities.
- 3. Make effective use of professional organizations, advisory groups and the FFA.
- 4. Consider timeliness in developing calendar of communications.
- 5. Provide training in effective use of public information materials.

II. *Establishing and Maintaining Instructional Programs*

Thrust A. Develop a realization by state and local boards of education that providing continuing, quality programs in young farmer and adult agriculture/agribusiness education is necessary.

- 1. Develop state task force to communicate with administrative units.
- 2. Establish local and state advisory committees to provide continuity.
- 3. State staff personnel are allotted full-time, or a percentage of time, for adult and young farmer consultant responsibilities.
- 4. Teacher educators are allotted full-time or a percentage of time, for adult and young farmer teacher education.
- 5. Local and area instructors are allotted full-time, or a percentage of time, for young farmer and adult agriculture/agribusiness education.

III. *Preparing Qualified Instructors for Young Farmer and Other Adult Education Programs*

Thrust A. Identify specific and unique competencies necessary for teaching performance.

- 1. Identify the jobs and level of sophistication expected.
- 2. Select competencies descriptive of job characteristics identified in Item I.
- 3. Rank competencies in order of priority.
- 4. Establish base-level competencies for beginning teachers.

Thrust B. Determine minimum professional instruction necessary in beginning teacher preparation.

- 1. Assess the content of current pre-service professional courses.
- 2. Survey other exemplary programs for suggestions in design and method.
- 3. Determine time available for adult/young farmer instruction in pre-service program.
- 4. Design modules of instruction that will provide the competencies needed.

Thrust C. Determine the specific and unique technical training necessary for a beginning teacher.

- 1. Assess the distribution and content of technical courses in the pre-service curriculum.
- 2. Survey exemplary teacher preparation programs with similar technical demands.
- 3. Establish a priority list of technical instruction which will provide the needed base-level competencies.
- 4. Seek adjustments in certification requirements to permit students to attain technical competence.
- 5. Seek opportunities for students to improve technical competence outside the curriculum.

- Thrust D. Determine specific and unique field experiences necessary in beginning teacher preparation.
 - 1. All trainees provided opportunity to observe young farmer and adult classes.
 - 2. All prospective teachers provided opportunity to enroll in, or participate in, an adult class or young farmer program.
 - 3. Professional participation roles in young farmer and adult classes required during student teaching.
 - 4. Opportunities provided for internship or apprenticeship teaching of young farmers and adults.
- Thrust E. Determine the in-service needs of adult/young farmer instructors.
 - 1. Ascertain competencies in Thrust A which must be gained through experience or in-service education.
 - 2. Survey teachers to determine in-service education needs.
 - 3. Assess capability of current professional staffs for providing needed instruction.
 - 4. Develop workshops, credit courses, or other in-service education programs.
 - 5. Obtain needed resource personnel.
 - 6. Reassess and update the in-service program annually.
- Thrust F. Determine agencies responsible for each phase of the preparation programs.
 - 1. State supervisory (consultant) staffs ascertained the need for teachers.
 - 2. Supervisory and teacher education staffs cooperatively designed teacher education programs.
 - 3. Teacher educators conducted credit courses, and noncredit programs on adult/young farmer education.
 - 4. State supervisors conducted or assisted teacher educators and teacher organizations in conducting noncredit programs.
- Thrust G. Make professional education programs in adult education available to school administrators and staff members.
 - 1. Provide a course in adult vocational education for administrators.
 - 2. Recommend above course be a part of certification requirements.
 - 3. Hold workshops and seminars in adult education for administrators.
 - 4. Include school administrators and vocational directors on adult education advisory committees.
- Thrust H. Develop program for recruitment of teachers.
 - 1. Identify persons with dedication and commitment who have or can acquire technical competence.
 - 2. Identify teachers who could allocate time for teaching adults.
 - 3. Recruit individuals with ability to use resource persons.

- 4. Utilize professional organizations in teacher recruitment.
 - 5. Develop undergraduate recruitment program for prospective teachers.
 - Thrust I. Provide for adequate, continuous funding of teacher education.
 - 1. Establish level of funding that will guarantee continuous programs in teacher education.
 - 2. Utilize professional organizations in obtaining funds.
 - 3. Encourage legislative effort.
 - 4. Ascertain that adult teacher education unique and not duplicating other instructional programs.
- IV. *Locating and Enrolling Students, and Determining Their Instructional Needs*
- Thrust A. Locating prospective students who need instruction.
 - 1. Use effectively personal contacts.
 - 2. Use advisory groups, FFA alumni and former students.
 - 3. Effectively use the news media.
 - 4. Solicit assistance from community organizations and government agencies.
 - Thrust B. Enroll students for specific educational programs.
 - 1. Enroll full and part-time farm operators.
 - 2. Enroll full and part-time farm workers.
 - 3. Enroll off-farm agribusiness employers and employees.
 - 4. Enroll others with special needs, e.g. landlords, conservation workers, etc.
 - 5. Use enrollment cards and have a set enrollment fee.
 - 6. Enroll for vocational education purposes without regard to sex, age or background.
 - Thrust C. Retainment of students enrolled.
 - 1. Provide quality instruction.
 - 2. Involve students in planning and in instruction.
 - 3. Provide programs of supervised practice that meet student needs.
 - 4. Acknowledge accomplishments of students—provide recognition.
 - 5. Provide incentive awards, certificates, etc.
 - 6. Involve students in group projects and cooperative activities.
 - Thrust D. Determining instructional needs of students.
 - 1. Survey prospective students to determine needs.
 - 2. Use advisory group.
 - 3. Use specialists representing agricultural agencies and organizations.
 - 4. Use successful farmers and businessmen.
 - 5. Consider backgrounds of individual involved.
 - 6. Consider family, social, and economic goals of participants.
- V. *Role of Educational Organization in the Instructional Program*

- Thrust A. Provide educational organization for participants in each continuing education program.
 - 1. Make organization an integral part of the instructional program.
 - 2. Use an advisory group for development.
 - 3. Develop program based upon local needs.
 - 4. Instructor serve as adviser and coordinator.
- Thrust B. Membership limited to participants enrolled in local program.
 - 1. Establish membership qualifications.
 - 2. Encourage membership of all class members.
 - 3. Encourage local organizations to belong to area/state associations.
 - 4. Encourage state association to participate in national institutes and seminars.
- Thrust C. Provide adequate leadership for educational organization.
 - 1. Develop needed competencies at pre-service level.
 - 2. Provide in-service instruction.
 - 3. Provide guidelines and sample legal documents.
- Thrust D. Develop organization program consistent with its educational purposes.
 - 1. Provide educational program to supplement class instruction—with or without funding.
 - 2. Provide leadership, social, recreational and community service activities.
 - 3. Organize a public relations program.
 - 4. Utilize, tours, field days, workshops and seminars.
 - 5. Recognize outstanding achievement.
 - 6. Encourage participation in state and national conferences.
- Thrust E. Organization cooperates with other organizations with similar goals.
 - 1. Cooperate with youth organizations.
 - 2. Cooperate with other phases of the Vo-Ag program.
 - 3. Coordinate activities with those of other agricultural organizations.
 - 4. Encourage members to participate in other agricultural and community organizations.
- Thrust F. Insure sound, broadly based financial structure.
 - 1. Provide local funding by membership decision.
 - 2. Support the state association and national institute.
 - 3. Sponsor fund raising activities.
 - 4. Follow approved accounting procedures.
- Thrust G. All states participate in the National Young Farmer Educational Institute.
 - 1. Send representatives from local and state associations.
 - 2. States pay voluntary fee to help support the Institute.
 - 3. Provide for sharing of materials and information among states.
 - 4. Send a coordinating committee from next year's host state to the Institute.

- VI. *Planning and Conducting Instructional Programs for Young Farmers and Adults in Agriculture/Agribusiness*
- Thrust A. Identify and validate adult agriculture/agribusiness program needs.
 - 1. Involve state and area administrative personnel (See item IV, D).
 - 2. Solicit help of representatives of agricultural agencies.
 - 3. Validate needs identified by agricultural agencies, businesses and industries, governmental data, and by local clientele.
 - 4. Coordinate effort of all agencies concerned with agricultural education.
 - Thrust B. Obtain necessary administrative approval and support.
 - 1. Follow appropriate channels in obtaining approval and support.
 - 2. Involve all phases of administration.
 - 3. Identify and obtain appropriate finances.
 - Thrust C. Determine priority rank of adult education alternatives.
 - 1. Evaluate demand in terms of need and clientele.
 - 2. Determine political, social and economic implications.
 - 3. Consider immediacy and duration of need.
 - 4. Determine availability of resources.
 - 5. Determine rapidity and magnitude of results.
 - Thrust D. Establish objectives to meet the needs of the students.
 - 1. Assess the present situation.
 - 2. Determine evaluative criteria.
 - 3. Classify objectives as product oriented or process oriented.
 - 4. Classify objectives as short range, intermediate range, or long range.
 - 5. Validate objectives in terms of meeting needs of students.
 - Thrust E. Effective implementation of program by individual teachers.
 - 1. Vocational agriculture/agribusiness instructor functions as instructor and coordinator of programs.
 - 2. Counsel of school and agency personnel is sought.
 - 3. Sufficient instructors are obtained.
 - 4. Instructors may be full-time or part-time.
 - Thrust F. Instructors assist adults in developing home libraries of technical materials.
 - 1. Current USDA and state publications are obtained.
 - 2. Commercial publications are collected.
 - 3. A reference list is developed.
 - 4. Lists of field days and demonstrations are maintained.
 - 5. Home filing systems are developed.
 - Thrust G. Instructors employ a variety of instructional methods.
 - 1. Instruction is based on farming or agribusiness needs of students.

- ___ 2. Classroom, shop, and field trip resources are used.
- ___ 3. Informal discussion, demonstration and panel methods are used.
- ___ 4. Adequate use is made of resource personnel.
- ___ 5. Individual on-farm, or on-job instruction is provided.

VII. Evaluating the Effectiveness of Instructional Programs

___Thrust A. Evaluation of physical and human resources used.

- ___ 1. Determine extent qualified instructors were available.
- ___ 2. Determine extent schedules of instructors were conducive to effective continuing education.
- ___ 3. Ascertain extent satisfactory classroom facilities were provided.
- ___ 4. Determine availability of satisfactory laboratory and office facilities.
- ___ 5. Ascertain availability of adequate finances.
- ___ 6. Determine whether appropriate instructional materials and equipment were available.

___Thrust B. Evaluation of teaching process.

- ___ 1. Determine extent objectives were related to students' interests, goals and competency needs.
- ___ 2. Ascertain instructional emphasis on decision making.
- ___ 3. Ascertain instructional emphasis on family goals and resource management.
- ___ 4. Determine use made of human and other community resources.
- ___ 5. Ascertain attention given to on-farm or on-job instruction.
- ___ 6. Determine emphasis given leadership development.
- ___ 7. Determine extent of participation of students in instructional process.
- ___ 8. Ascertain extent a variety of instructional methods were used.

___Thrust C. Evaluation of student progress.

- ___ 1. Determine short, intermediate and long-term goals attained by students.
- ___ 2. Ascertain extent students developed workable plans for goals unattained.
- ___ 3. Determine changes in production and marketing practices used as a result of instruction.
- ___ 4. Determine extent sound business management programs are utilized by students.
- ___ 5. Ascertain economic growth of individual students.
- ___ 6. Determine competencies acquired and used by students.
- ___ 7. Determine evidences of leadership development.
- ___ 8. Explore occupational opportunities and make advancement in an agricultural occupation.

___Thrust D. Use effectively findings resulting from evaluations.

- ___ 1. Base requests for and allocation of funds on evaluative data.
- ___ 2. Allocate human resource time according to findings.
- ___ 3. Use findings in program development.
- ___ 4. Use findings in obtaining public support for the program.
- ___ 5. Base career planning and placement of students on findings.
- ___ 6. Use findings in assisting students in fulfillment of their needs.
- ___ 7. Use findings in planning pre-service and service teacher education.

VIII. Meeting the Instructional Needs of Adults in Off-Farm Agribusiness Occupations

___Thrust A. Determine the educational needs of the agribusiness industry in the community.

- ___ 1. The agribusiness industry in community identified.
- ___ 2. The agribusiness industry is surveyed to determine needs.
- ___ 3. Existing educational programs for agribusiness personnel are identified.
- ___ 4. Persons needing up-grading of skills or training are identified.

___Thrust B. Establish a variety of programs or models.

- ___ 1. Establish adaptations of young and adult farmer program models.
- ___ 2. Establish program models to serve large agribusiness corporations, agencies, unions and employees.
- ___ 3. Utilize advisory committees in identifying program areas.
- ___ 4. Seek out direct requests from industry for programs.
- ___ 5. Provide for extensive use of industry personnel as instructors.
- ___ 6. Establish effective administrative structure.

___Thrust C. Determine the educational needs of workers in off-farm agribusiness.

- ___ 1. Survey the agribusiness industry.
- ___ 2. Conduct surveys through news media.
- ___ 3. Contact community organizations and agencies.
- ___ 4. Use advisory groups.

___Thrust D. Form a state advisory committee.

- ___ 1. Committee establish guidelines for program development.
- ___ 2. Committee provide direction to teachers and state consultants.
- ___ 3. Committee seek certification and regulatory flexibility.

Agricultural education personnel and administrators have a huge task to perform if the educational needs of present and future agricultural workers are to be met. Determine your role in this effort and use the suggested guidelines in effectively fulfilling your responsibility. There is no doubt. The opportunity is yours.

STATE ADMINISTRATION IS RECOGNIZING NEEDS AND ACTING

E. B. Oleson, State Director
Division of Vocational Education
Pierre, South Dakota



E. B. Oleson

Since the passage of the Vocational Education Act of 1963, we in vocational education have seen a new growth and emphasis placed on preparing people for specific employment and retraining people for new vocations. This redirection of effort has been especially noticeable in the area of agricultural education.

The Vocational Amendments of 1968 provided money for program research and development and exemplary projects. The funds for exemplary programs was especially significant in the development of programs in rural areas. South Dakota has utilized the funds to determine the feasibility of sharing facilities and resources under a multi-district secondary occupational-vocational center concept.

This concept started as a dream and has evolved into the start of a statewide system of vocational education training and exploration of careers at the high school level. And, in a sparsely populated state the multi-district concept, which allows school districts to band together to transport students to a centralized vocational facility, was possible through the availability of exemplary money. The initial concept has produced another important offshoot: the development of mobile vocational

Administration is much more than paper work and finances.

classrooms for use in remote areas of the State where large distances made transporting students impossible.

Probably the most important point of all is that none of these various programs would have been possible if we looked at administration and supervision of vocational education as a paper shuffling responsibility.

Good administration of vocational education programs means involvement and concern for the end product, the people actually receiving the benefits of vocational training. Administration does little for vocational education unless what we do as administrators leads to better programs. Administration is much more than paper work and finances. If we are to be successful, emphasis must be placed upon supervision, the improvement of instruction, better relating programs to actual and anticipated labor market needs and job opportunities.

A prime example of redirection in South Dakota is in the area of vocational agricultural programs. In 1950, 40.1 percent of the population was engaged in direct farm production as farmers, farm managers, farm laborers or farm foremen. In 1960 this drastically decreased to 29.8 percent and in 1970 it further decreased to 21.5 percent. During the same 20-year span, the increase in agribusiness and other agriculturally related activities increased significantly. As a direct result, vocational education programs were design-

ed to reflect this new concern and direction. In 1950, agribusiness courses were virtually nonexistent. Today they are a prime focus in both secondary and post-secondary vocational programs. Effective administration and supervision spotted the trends and provided new options in the growing agriculturally related fields.

We have not forgotten the significance of production agriculture in South Dakota. Production of agricultural goods and services still provides over four billion dollars in state income. Our vocational programs have been redesigned to meet the increasing demands of both production and agribusiness fields.

At the secondary level, 63 vocational agriculture programs provide dual-purpose training for both production and agribusiness fields. At the post-secondary level, five major areas of concentration (1. farm equipment and diesel mechanics, 2. agribusiness technology, 3. agricultural maintenance and management and 4. agricultural marketing and management and 5. agricultural technology and ranch management) provide increased job opportunities for vocational students. All of these programs have been developed and offered within the past eight years.

A look at the statistics indicates increased agricultural education activities in the future. At present, 165,000 people in a State with a total population of 666,257 are employed in the field of agriculture, (66,000 in production and 99,000 in non-farm, agribusiness areas). As this trend continues, we as administrators must constantly be on the lookout for new trends and new patterns.

Instructor's Self-evaluation-- An Aid to Supervision

Wayne G. Koene
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Wayne G. Koene

One of the most successful post-secondary agricultural education programs in Wisconsin is the Farm Training Program, designed for those persons becoming established in farming as a career.

Last year, 45 instructors were employed by the sixteen Vocational, Technical and Adult Education Districts in the State to provide the instruction to over 3,700 persons who were enrolled in the program.

Each district, comprising several counties, employs from two to nine full-time instructors. They give both formal classroom instruction at various locations throughout their respective districts and individual on-the-farm instruction to the enrollees for a period of five consecutive years. Their immediate supervisors are either the Agriculture Coordinators or Field Services Administrators who are members of the district administrative staff.

The instructors usually maintain offices in their homes, often many miles from the district offices where their supervisors are located. This may create a "communication's gap" unless special methods of accounting for the activities of the instructors are implemented. These special supervisory techniques assure that the highest quality of instruction is given to the students.

One very successful method is that of instituting a self-evaluation method whereby the instructors can judge

their performance based on guidelines developed by the State Board of Vocational, Technical and Adult Education and their local VTAE Districts. By following these guidelines, school policies and standard procedures; the instructors are, to a great extent, able to become self-administering.

In order for this to work effectively, instructors must be selected who are honest, dedicated, knowledgeable in all aspects of agriculture, and above all, capable of a high degree of self-discipline. Such persons can meet the requirements of the program without a great deal of direct supervision.

Devices employed by Wisconsin VTAE Districts to implement the self-evaluation method include the following: 1) Careful planning is done by both the instructor and the supervisor to be sure that specific objectives of the program are met. These objectives are reviewed at least annually and revised as necessary. 2) A detailed itinerary, usually in the form of a monthly calendar, is submitted in advance to the supervisors by the instructors. The itinerary gives the dates, times and locations of the classes as well as the schedule for individual on-farm instruction for each day of the month. 3) Monthly staff meetings are held in which the instructors and their supervisor meet face-to-face to discuss mutual concerns; 4) Newsletters from the supervisors to the instructors are sent between the monthly staff meetings; 5) Written reports from the instructors to the supervisors are made on a monthly basis including data relative to current enrollments, units of

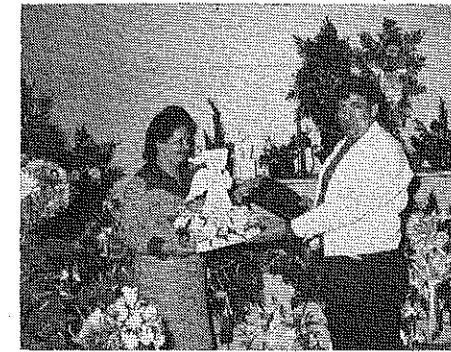
instruction (classes), number and hours of individual instructional visits including instructional emphasis of such visits, expenses and other concerns that should be called to the supervisor's attention. 6) Occasional visits are made by the supervisor to the instructor's classroom and 7) Supervisors accompany the instructor on occasional individual farm calls.

Some of the most effective criteria used in evaluating the instructor's performance are: 1) retention rate (Are the students satisfied with the program by re-enrolling each of the five years or do they drop out?); 2) student financial progress as measured by the net worth increase over each of the five years they are enrolled (Are they able to make better farm management decisions because of their participation in the program?); 3) student feedback as expressed by an annual evaluation survey sent to each enrollee by the supervisor; 4) attendance at class sessions; and, 5) evaluations made by the program advisory committees (usually each instructor has his own advisory committee representing persons familiar with the Farm Training Program in his service area.)

Self-evaluation by the instructor is an aid to supervision of the Farm Training Program in Wisconsin. It has proven to be a very satisfactory technique. While it is not without faults, it does appear to be working very well as expressed by both the instructors and the supervisors. The methods expressed in this article may have value in similar programs in other states as well.

Teacher-Industry Personnel Exchange

Warren Wells
Holston High School
Demascus, Virginia



No, it isn't vows they are exchanging. Flower shop owner-operator Lois Martin is exchanging a floral arrangement for the teacher's grade book of Warren Wells which symbolizes what is believed to be a unique program for industry experience for teachers.

We feel that the program has brought the businesses and the school much closer together in their understanding of each other's problems.

Today, instead of teaching vocational agriculture classes, I worked in Martin's Flower Shop. I assisted in the preparation of Christmas corsages and boutonnières for the employees of a business in town, assisted in the sales of live and artificial plants and arrangements, helped store and care for floral materials, and discussed the purchasing procedures followed in maintaining a stock of floral materials for any occasion.

Next week I may assist in funeral arrangements or even a wedding. Will this put me behind in my teaching preparations? I don't think so, because in return, the owner of the flower shop will assist me with classroom instruction in floral arrangements for both the in-school horticulture students and adult evening horticulture classes. This is part of the participation in the EPDA Business and Industry Exchange Program at Holston High School.

Why do we need this program? Increasingly vocational agriculture and other vocational teachers are being "aged up" in the classroom and teaching laboratories because of the increased student enrollment and the shortage of vocational teachers. This provides them with only a very limited exposure to the outside area of business and industry. Our knowledge of the many activities in the world of work is limited as a result of lack of time for self training and the time lapse since entering the teaching field of our choice.

With this in mind, Dr. Martin B. McMillion of Virginia Polytechnic Institute and State University, the project director, has set up an EPDA project in which Virginia vocational teachers may exchange work experience with people in the area of business and industry in their respective teaching disciplines. At the present, teachers in the area of vocational agriculture, business,

distributive education, home economics and industrial arts are participating in the program.

Basically, the program consists of the individual teacher contacting various businesses in his local area and arranging exchange programs in which he or she will work and observe and in return receive classroom instructional assistance from a person in that business or industry. A one to one trade-off is desired, but it is realized that this is not possible in all cases. Therefore, the teachers try to arrange equal exchanges of time, and if this cannot be done, they can use any other activity that might result from the swap, such as field trips or group demonstrations.

At Holston High School, where we are participating in this program, we are working with three separate busi-

ness or industries. They are (1) Meadowview Farm Supply, (an International tractor and New Holland dealership); (2) Martin's Flower Shop (a retail florist), and (3) Spahr's Greenhouses (a wholesale plant and flower producer).

In the tractor dealership, we are observing and working with the sale of new and used equipment, as well as setting up of new equipment. In return we will receive new equipment to be used in our instruction for the Agriculture Machinery Sales and Service option, demonstration of major new equipment, and instruction in careers in agricultural machinery.

The other two exchanges deal with ornamental horticulture. By working with a wholesale grower or producer and a retail outlet, we are able to observe the whole spectrum of floriculture.

From the wholesale grower operation, we will be exposed to the many facets of production of flowering potted plants, foliage potted plants, cut flowers, bedding plants and vegetable plant production. With the many activities to observe, we may find this exchange should be much longer and maybe involve a year. After the business people became acquainted with the school and its facilities, we may have a couple of teaching converts already from this business. In exchange we will receive greenhouse tours and lectures on specific production procedures on fertilization, lightening, media preparation, watering, pest control, and disease prevention, detection, and cure.

In this program, the teacher spends eighty (80) hours or the equivalent of two weeks of time which may consist of observation and or productive work activities. This time is scheduled to fit the schedules of teachers and business or industry persons. Also the teacher

(Concluded on next page)

SUPERVISION IS A COMPETENCY FOR TEACHERS

Warren D. Reed
Assistant Chief
Bureau of Agricultural Education
California



Warren D. Reed

An important function in any total agricultural educational system is supervision. All persons within the system are subject to supervision and nearly all persons within the system supervise to some degree. It can be seen, then, that an understanding of the purposes of supervision and expertise in its techniques are essential competencies for all people involved in agricultural education: remember, *all people*, not only administrators, but also teachers and students.

Very simply, supervision is the function of directing or overseeing the activities of other persons. It probably is more important to consider the purposes of supervision rather than its definition. Here again, there probably is not too much difference of opinion as to the purpose of supervision: "to cause those being supervised to be more effective in their operations."

There more than likely is divided opinion and lack of understanding about practices to use which will contribute to effective performance in the role of supervisor.

Most persons who have earned educational administration or supervision credentials or have otherwise prepared themselves to function in a role of

administrator/supervisor have had formal instruction in techniques of supervision. An important question, though, is: "How well prepared is the *teacher* of vocational agriculture in the area of supervision and what are his needs in this area?"

First, let's consider the vo-ag teacher's need to be skilled in supervision. In all likelihood, the most successful vo-ag teacher is one who consistently and consciously functions as a supervisor in conducting his instructional program. He is directing or overseeing the activities of his students as they pursue their preparation for an agricultural career in order that those students will be more effective in attaining their occupational and educational goals. Long-held tenets in agricultural education are "learn-by-doing" and "occupational preparation according to individually held career goals," and they are viable only in an environment where the teacher serves as a moderator (supervisor?) or learning rather than as a purveyor of knowledge.

For example, it is no accident that we place such great emphasis on that unique and most important component of Vocational Education in Agriculture, Supervised Occupational Experience. It is the vo-ag teacher's role as supervisor of his students' participation in occupational experience which causes this planned segment of the vo-ag program to be such an effective augmenta-

tion of other more formal learning experiences which are campus-based. Nor should we lose sight of the fact that advisors of FFA chapters contribute more toward accomplishing goals of FFA if they serve as supervisors of the chapter's officers as they direct the affairs of the chapter.

We have seen, then, that a most important technique of instruction utilized by vo-ag teachers in conducting their instructional programs is function as a supervisor of learning experiences.

There is yet another reason why a vo-ag teacher must be knowledgeable and adept in the psychology and techniques of supervision. Nearly every one of his students eventually, in the course of their agricultural careers, will be found in the role of supervisor. In order for the instructor to be in a position to assist his students in acquiring those necessary *occupational competencies* in supervision he, himself, must be so equipped and oriented.

Like other competencies, those in supervision must be learned. Are we providing opportunity and encouragement to teachers to become competent in the psychology and techniques of supervision? Probably not, and it is important that we lose no more time altering our pre-service and in-service agricultural teacher preparation programs as needed to correct that state of affairs.

from my students and perhaps from those now employed in business and industry.

Finally, as a vocational teacher posed to industry, I receive favorable publicity upon being seen during exchange period. This becomes evident when the parent of a student exclaims, "I didn't know that could make a floral arrangement that!"

Student Placement Folders and Accountability

Gary E. Moore*



Gary E. Moore

During a student's high school career, he or she will spend anywhere from 700 hours up to 1,600 hours in the vocational agriculture class. What will the student show for all of this time?

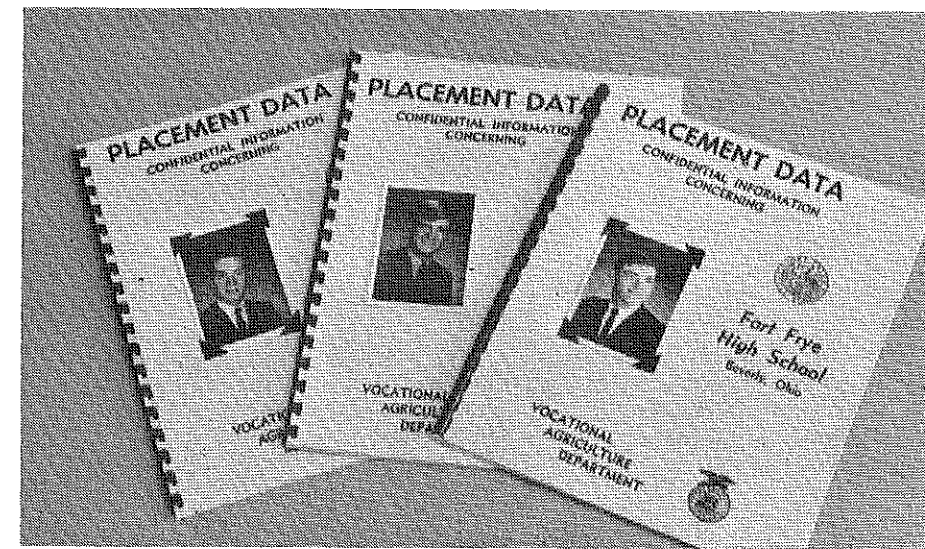
We in vocational agriculture can rattle off a long list of desired outcomes, such as developing leadership skills, promoting brotherhood, improving cooperation, and building better citizens. These are all notable goals, but it should be remembered that the primary purpose of vocational agriculture is to prepare students for careers in agriculture. When a student leaves a program of vocational agriculture, he should have enough skills to enter a job. This is what accountability is all about.

At Fort Frye High School, the agriculture department became concerned about accountability several years ago. While filling out a student follow-up questionnaire for the State Department of Education, it was realized that many of our past students who had spent some 1,000 hours in our vocational agriculture program were not employed in the field of agriculture. As a matter of fact, the batting average was rather poor. This raised two questions in my mind:

1. Why were the students not getting jobs in agriculture, and
2. Why should our school board and the State Department of Education invest so much money in our program?

My main concern was to tackle the first question. If the problem of why students were not getting jobs in agriculture could be solved, then there would be little reason to worry about the second question.

After talking with several of our



Samples of student placement folders used in the high school vocational agriculture department at Beverly, Ohio

former students and talking with potential employers of these students, several interesting facts came to light. The students wanted jobs in agriculture, but were not sure of how to find them or how to get the jobs. The employers were not aware of the type of training acquired by the vocational agriculture students.

To help bridge this gap and improve accountability, a student placement folder was developed. This placement folder has been a great aid in helping students land the jobs they want and in helping employers understand the vocational agriculture program.

Building the Folder

The first step in preparing the folder was designing an attractive cover containing the school emblem, the FFA emblem, and a place to insert the student's picture. A local printer ran off 100 of these covers.

Determining what to include on the inside of the placement folder was the next step. The following is a brief description of each page:

*Gary E. Moore, former teacher of agriculture at Beverly, Ohio, is a graduate teaching associate at Ohio State working on a Ph.D. in Vocational Education and Agricultural Education.

Student's autobiography. Each student writes a one-page biography about himself describing his background, philosophy, and beliefs.

Student information sheet. One page has basic information about the student, such as address, work experience, high school activities, and honors received.

If the student has won any *noteworthy honors*, we make a copy of the newspaper article and insert it.

Student equipment and skills sheet. One page lists all of the equipment the student can operate and also lists the specific vocational skills that he has.

References. One page contains a list of personal references that the student has supplied.

Three copies of letters of reference. After the student supplies the agriculture department with a list of references, the department writes for the letters of reference to be placed in the student's folder. This saves the potential employer the time and trouble involved in doing this.

(Concluded on page 285)

(Wells—from page 281)
will receive three (3) graduate credits after completion of the eighty (80) hours of time and attendance of three (3) group meetings scheduled in his area of the State.

So far, this program has been very informative. We feel that it has brought the businesses and the schools much closer together in their understanding of each other's problems. When I go

into the classroom now, I can provide the students with new and practical information on how particular problems are being solved in industry today. Industry, on the other hand, is willing to help me teach my students. Also greater familiarity with teaching facilities and procedures that follow in instruction allows me to increase desirable student enrollment, place pupils appropriately, and finally to recruit future teachers

WHAT DO STUDENTS ACHIEVE BEST IN VOCATIONAL AGRICULTURE?

Arthur T. Neavill
Dearborn Public Schools
Dearborn, Michigan

What characteristics do "good" agriculture students possess? Each teacher has a notion of what he thinks are his talented and not-so-talented students. In this article, I shall review findings from a study in Ohio that was designed to describe the characteristics of tenth-grade students who had completed two years of instruction in vocational agriculture and to investigate what characteristics of students and what characteristics of vocational agriculture programs were related to students' level of mastery on a criterion-referenced test on the basic principles of agriculture. In other words, what characteristics do students possess who achieve highest in agriculture?

Criterion-Referenced Assessment

Renewed emphasis on evaluation has focused special attention on outcomes as measures of effectiveness of programs. In this study, the use of criterion-referenced tests were used as an indication of students' level of mastery in agriculture. It should be remembered that criterion-referenced tests are based upon what the student can do relative to prespecified objectives and not how he stands in comparison to others. Students' scores are reported in terms of performance levels.

Procedures

Information for the study was collected through the use of a group-administered questionnaire that included questions about place of residence, occupational and educational plans, school and community activities, person influencing decision to study agriculture, and supervised experience programs. Data were also gathered through the use of a 102-item criterion-referenced test which was administered at the close of the 1972-73 school year to tenth-grade students who were completing two years of vocational agriculture in 31 randomly selected local schools in 22 vocational education planning districts in Ohio. Data were available for 381 students.

Student Characteristics

What characteristics do students who study agriculture possess? Students are predominantly male and reside on farms. Two-thirds of the students indicated an occupational choice; while 70 percent of those students indicating an occupational choice indicated an interest in agriculturally-related jobs.

When asked to check from a list the person who had the most influence on their decision to study agriculture in high school, approximately one-half of the students indicated themselves, and 17 percent indicated that their fathers had influenced the decision. The remaining checked one of the

following persons, in rank order: close friend, brother, sister, agriculture teachers, close relative, guidance counselor, and others. More than one-half of the students indicated they planned no further education after school. Ninety percent planned to attend a four-year college.

Ninety-nine percent of the students were FFA members. The students tended to select livestock projects, improvement projects, crop projects, and farm place as supervised experiences.

Factors Related to Level of Mastery

Another major question investigated was: For students who have studied vocational agriculture in grades 9 and 10, what was the relationship between the students' level of mastery on the criterion test and selected characteristics of the students and characteristics of vocational agriculture programs? A review of the correlations of students' scores and characteristics reveals that students performing at higher levels of mastery on all items tend to:

- select an occupational choice in contrast to not selecting an occupational choice or indicating that they planned to enter the military service.
- select jobs requiring knowledge and skill in agriculture (production agriculture jobs or non-farm agriculturally-related jobs) rather than non-agriculturally-related jobs.
- have fathers employed in production agriculture or agriculturally-related jobs in contrast to non-agricultural jobs.
- plan to attend four-year colleges and technical institutes or community colleges after high school in contrast to having no plans for further education or having plans to attend short courses.
- participate in more community activities.
- have more supervised experience activities.
- participate in more FFA contests and award activities.
- hold membership on more FFA committees.

Challenges

The findings are useless unless we are willing to take the initiative and analyze why these findings were such. The following summary statements are questions and comments that are presented for consideration as we derive plausible implications.

Several of the findings hint that ninth and tenth-grade vocational agriculture still carries the stereotype as a program primarily for rural boys whose primary interest is farming. Students who achieve higher levels of mastery are those who reside on farms, have fathers who are farmers.

(Concluded on page 285)

TEACHER RECRUITMENT--SUPERVISOR'S VIEW

Vernon D. Luft, Supervisor
Agriculture Education
Helena, Montana



Vernon D. Luft

An issue which should be of growing concern to administrators and supervisors of programs of vocational education in agriculture is recruiting an adequate supply of teachers. How many programs in vocational agriculture were unable to open in your state because a teacher was not found to fill the vacancy? Or, how many departments had to close because vocational agriculture teachers were unavailable?

If the above questions were answered with a number of significant size, a thorough evaluation of recruitment practices may be necessary. Vocational agriculture cannot meet its program demands if the profession itself does not replenish its teaching corps through active recruitment. Recruiting becomes the first step in alleviating the long-standing shortage of vocational agriculture teachers in the United States.

Need for Recruitment

The change from vocational agriculture programs in production agriculture to specialized programs preparing students for off-farm agricultural occupations has increased the demand for vocational agriculture teachers. The continued growth of vocational education in agriculture will depend largely on the ability to supply necessary teachers. Without additional teachers, vocational programs cannot expand and improve.

Available employment opportunities for agricultural education graduates in business, industry, government and international programs also contribute to the need for increased recruitment efforts. We not only need to recruit students to major in Agricultural Education in our colleges and universities, we must also entice our graduates to enter the teaching field. The low percentage of qualified graduates who

enter teaching supports this need.

When considering the normal turnover of vocational agriculture teachers, the low percentage of qualified graduates entering the field each year and the growth of new programs and expansion of existing programs, the need for active recruitment becomes paramount.

A Problem—Locally and Nationally

Who is responsible for the task of recruiting a sufficient supply of vocational agriculture teachers to meet the needs—current and future? It is the responsibility of all those concerned with vocational education in agriculture from the local to the national level.

The local vocational agriculture instructor has the most influence on the students in high school agriculture programs. He is the best link we have between the local program and the university agricultural education program. The teachers' influence can be a deciding factor as to whether or not a student chooses teaching for a career.

Some people believe recruitment is a responsibility of the local district. This is true in a sense. The local districts must recruit people to fill their vacant positions. However, they must have a supply of qualified teachers from which to make their selection.

The primary responsibility of teacher recruitment lies with the teacher education institutions and state departments of education. Recruiting practices must be developed to provide an adequate supply of vocational agriculture teachers. Information must be supplied to guidance counselors to acquaint them with the opportunities available for students to become agriculture teachers. Supervisors and teachers educators should share ideas of their successful recruiting practices with others across the nation.

National efforts to help alleviate the teacher shortage in some states might include encouraging agricultural education graduates to cross state lines to seek teaching positions. Some states do

provide an adequate supply of teachers to meet their needs. In this case, any surplus of qualified people should be encouraged to obtain a position in a neighboring state.

Summary

A joint effort and a personal pledge to participate in an active recruiting program by all those concerned will help alleviate the shortage of vocational agriculture teachers in the nation. Let's not deprive students of the opportunity to participate in a vocational agriculture program just because teachers are not available. Let's not allow schools to close existing departments because they cannot find a qualified teacher. Let's supply our local schools with the necessary vocational agriculture teachers through sound programs of teacher recruitment. ◆◆◆

(Moore—from page 283)

High school transcript. A copy of the student's high school transcript is enclosed in the placement folder.

Besides this necessary information, other information could be easily added. Students in Business and Office Education help type up the information. A back cover, which is of the same material as the front cover, is used at the end of the folder, then the entire folder is bound with a plastic comb. Three folders are constructed for graduating students. These are kept confidential in the agriculture department's files. When a student goes to apply for a job, a sealed copy of this folder is sent to the employer.

These placement folders have increased the number of our graduates employed in agriculture. If vocational agriculture is to remain in the favorable position that it is, we must be accountable to our students. Placement folders for our students will help us be more accountable. ◆◆◆

BOOK REVIEWS

MODERN CONCEPTS OF FARM MACHINERY MANAGEMENT by Wendell Bowers, Champaign, Illinois: Stipes Publishing Company, 1970. 126 pages, Price \$3.25.

If you are in the market for a practical, useful reference for a farm machinery class, look no further. This excellent publication, which represents the third edition of Professor Bowers work, is a series of down-to-earth explanations of some rather complex and complicated concepts of machinery and equipment management. Each of the eight chapters in this "workbook" offers a basic explanation of the concept followed by a series of common, everyday problems which may be solved by the class as a group or assigned to individual students.

Students enrolled in farm machinery classes frequently are more highly motivated by the doing aspects of the course, such as tractor driving or machinery repair. This book should be of immeasurable value to the instructor who is attempting to stimulate student interest in the concepts and ideas supporting effective machinery utilization.

Professor Bowers is a member of the Agricultural Engineering faculty at Oklahoma State University. His publication of this textbook makes available to us the many practical lessons which he has accumulated over the years. Special attention is given to selection of the right machine for each particular farming operation.

A unique feature, and one which adds immeasurably to the instructional value of this work, is the inclusion of an extensive appendix which includes all of the diagrams and illustrations found in the text. The large type and clear detail of these illustrations should serve as ideal transparency masters for use with the overhead projector.

Students of farm machinery, whether they are enrolled in high school, community college or short-term extension classes, should benefit from this fine presentation of concepts related to farm machinery management.

Larry P. Rathbun
California Polytechnic State University
San Luis Obispo, Ca.

(Neavill—from page 284)

employed in agricultural occupations, have made at least a tentative occupational choice—probably an agricultural occupation—participate in more community and high school activities, conduct several supervised experiences, and are members of the FFA. In Ohio and perhaps in other states, we have said for years that the agricultural program should meet the needs of different types of students and appeal to students other than those described above. If the programs continue to attract predominantly one type of student, are we really changing the image and program content of agricultural programs?

In all subject areas of the study (leadership, agricultural occupations, animal science, crop and soil science, and agricultural mechanics) students performed at a relatively low level of mastery. What should the level of per-

EDUCATORS GUIDE TO FREE GUIDANCE MATERIALS, Edited by Mary H. Saterstrom and Joe A. Steph. Randolph, Wisconsin: Educators Progress Service, Inc., 1973, Twelfth Edition, 314 pages, Cost \$8.75.

The guide is devoted exclusively to free guidance and counseling materials designed for use by guidance counselors, librarians and teachers from the elementary through college level. It contains a list of selected guidance films, filmstrips, slides, audiotapes, videotapes, scripts, transcriptions, charts, bulletins, pamphlets, exhibits, posters and books that are available free of cost. A total of 1,290 listings are found in this guide.

The listings in this guide are grouped into

four categories which are career materials, social-personal materials, ability to self and others and use of time. The subject matter areas in categories are occupational and educational information, interpersonal relationships, individual differences, understanding natural differences, personal health and conservation of our resources and crafts, art and recreation.

All of the guidance materials in the guide are to be ordered directly from organizations which developed the materials. Complete instructions for requesting materials are included.

LeeRoy W. Kiesling, Ed.D.
Agricultural Education
The University of Tennessee

From the Book Review Editor's Desk . . .

BOOKS TO BE REVIEWED

AGRICULTURAL GENETICS: SELECTED TOPICS

Edited By Rom Moav
Halsted Press, A Division of John Wiley & Sons, Inc. (1974)

ECONOMICS OF AMERICAN AGRICULTURE

By Walter Wilcox, Willard Cochrane, and Robert Herdt
Prentice-Hall, Inc. (1974)

INSECTS IN RELATION TO PLANT DISEASES

By Walter Carter
John Wiley & Sons, Inc. (1973)

PRINCIPLES OF DAIRY SCIENCE

By G. H. Schmidt and L. D. Van Vleck
W. H. Freeman and Company (1974)

INDIVIDUALIZED INSTRUCTIONAL SYSTEMS FOR VOCATIONAL AND TECHNICAL EDUCATION: SERIES OF INSTRUCTIONAL MODULES AND A COLLECTION OF READINGS

By Nevin R. Frantz, Jr.
Vocational Instructional Systems (1974)

ANATOMY AND PHYSIOLOGY OF FARM ANIMALS, 2nd ed.

By R. D. Frandson
Lea & Febiger (1974)

If you feel qualified to review one of these books and desire to do so, write the Review Editor and he will send the book for review. Once reviewed, the book comes the property of the reviewer. P. Key, Book Review Editor, Agricultural Education Department, Oklahoma State University, Stillwater, Oklahoma 74068

formance be for students who are completing two years of instruction at the ninth and tenth-grade level in vocational agriculture? Do the findings indicate a need for revision of instructional content or more thorough evaluation techniques to determine if we are teaching what we say? In addition, guidelines need to be established for what are considered to be an acceptable level of mastery by students and persons responsible for determining these levels.

Criterion-referenced assessment is but one method of evaluating outcomes and caution should be used in making administrative and program decisions on one evaluation technique. Examine the findings carefully; and if a discrepancy appears to be a discrepancy in the results, it may be necessary to use other evaluative measures to determine the factors, i.e., content or teacher effectiveness that may affect the outcomes.

BOOK REVIEWS

INDOOR EDUCATION EQUIPMENT, by Russell E. Bachert, Jr.; and Emerson L. Snooks. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1974, 204 pages. \$7.95.

This book contains examples of various pieces of equipment that can be constructed for many of the natural phenomena in the environment. The contents are divided into chapters, as follows: Animal Life, Water, Weather, Soil, and Miscellaneous. All of the equipment is designed to be made of readily available materials. Lists of the equipment along with the materials needed, procedure, and activities are given for each piece. Approximately 100 pieces of equipment are shown. The book is printed on 11-inch paper and is paperbound.

The authors have had considerable experience in outdoor education and teaching. Their work has also included considerable work with environmental matters and adventure programs for youth. It is evident that the equipment presented in the book reflects a practical orientation toward outdoor and environmental education.

The book will be most useful with junior high and high school students. Applications are made to most biological and physical science areas commonly included in the curriculum. The equipment is designed for use on the school grounds or at a nearby vacant lot. Teachers of production agriculture will find the chapter on Soil helpful in making instruction in soils more meaningful to students. Natural resources teachers will find the chapters on Animal Life, Water, and Soil helpful in conducting experiments. The equipment is simple enough to be made by most students, depending upon their dexterity. No special tools are required. Common hand tools, such as hammer, saw, and pliers, are sufficient. The materials needed to construct the equipment are readily available and include such items as nails, scrap wood, plastic jugs, corks, coat hangers, and thread spools.

Jasper S. Lee
Virginia Polytechnic Institute & State University

LAW AND COURT DECISIONS IN AGRICULTURE, by N. G. P. Krueger and H. W. Hannah. Champaign, Illinois: Stipes Publishing Company, 1973, 469 pp. \$12.50.

This book contains an explanation of the law and court decisions related to agriculture. Emphasis is on those affecting the farmer, but there are several chapters which deal with various aspects of laws and court decisions affecting agribusiness. The book is written by explaining the meaning and application of law. Fourteen chapters are devoted to different areas, such as contracts, ownership of property, use of farm machinery, water and drainage, tenancy, insurance, sale of products, and reg-

Jasper S. Lee
Virginia Polytechnic Institute & State University

LABORATORY STUDIES IN FIELD CROP SCIENCE, by A. W. Burger. Champaign, Illinois: Stipes Publishing Company, 1967, 2nd ed., 221 pp., \$5.00.

This is a laboratory manual designed for students in field crop science courses. The manual has been well planned with easy to understand exercises which can be performed during a two hour laboratory period. Ample space has been provided for students to record experimental results or comments. In addition, each exercise has a set of review questions and references to aid the student in a more complete understanding of the material.

Laboratory exercises cover areas in plant nomenclature, classification, weed and seed identification, seed anatomy, crop physiology, growth regulators, weeds, crop insects and diseases, and reproduction. The appendix includes a laboratory schedule in addition to the necessary lab supplies, plant materials, and reagents for each experiment. The manual also includes a 216-word glossary which would be valuable in any basic agronomy course.

Laboratory Studies in Field Crop Science is best suited for college students enrolled in field crop courses. High school Vo-Ag teachers may find selected exercises quite valuable for advanced students provided the necessary materials are readily available.

Dr. Stephen S. Miller
Horticulture Department
James Rumsey, Vo-Tech Center
Martinsburg, West Virginia

THE RETAIL FLORIST BUSINESS, by Peter B. Pfahl. Danville, Illinois: The Interstate Printers and Publishers, Inc., Copyright 1973, Second Edition, 455 pp. Price \$7.50.

This excellent book dealing with the retail florist industry is an updating of an earlier first edition that was published in 1968. Between its covers is the specific information which will give the reader an understanding of all aspects of the retail industry.

The author, a noted horticulturalist, holds a doctorate and currently serves as an Associate Professor of Floriculture at The Pennsylvania State University. He is familiar with all phases of the industry and presents specific information concerning this rapidly expanding segment of our business communities.

Dr. Pfahl has done a masterful job in organizing the material presented in an easy-to-follow manner. The contents flow smoothly from the basics of business management, which includes chapters on such items as: personal qualifications, types of flower shops, site locations, operating procedures, efficiency, buying and pricing, advertising, merchandizing, salesmanship, delivery and credit; into the basic skills and techniques of design principles, flower arrangements, special occasion decorations, corsage construction and the use of related materials. Photographs and step-by-step drawings add to the overall effectiveness of the book. A special glossary of terms common to the florist industry and terms necessary for a student to master further add to the value of the text.

Probably the greatest quality exhibited by this book is its concise, easily read contents. Material is presented that will appeal to a wide readership including high school students, vocational technical students, college students and to individuals who are established in the florist business.

This new edition would serve both as an excellent reference book for classes dealing with Vocational Career Orientation, or as the basic text for a specialized class dealing with the retail florist industry whether the course be at the secondary or post-secondary level of vocational education.

L. G. Peters
Ag Occupations Coordinator
New Ulm Senior High School
New Ulm, Mn.

CLIP ART No. 3, American Association of Agricultural College, Editors. Danville, Illinois: Interstate, 1973. 168 pages, Cost \$6.95.

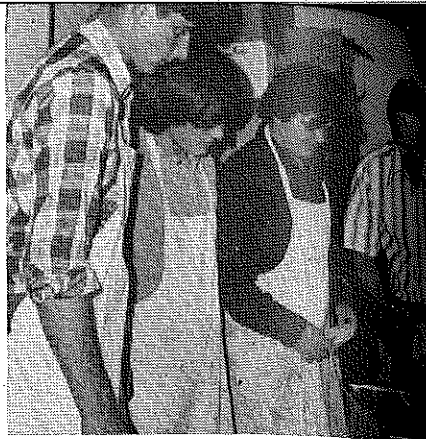
The book is a series of pictures and animations in the field of agriculture and home economics.

This book would be helpful to anyone needing to liven up copy, or materials to be reproduced for transparency masters. It could be used by agricultural and home economics personnel, along with any person needing pictures in these areas.

Theodore P. Swingle
Indian River Community College
Ft. Pierce, Florida



FHA Loans Help Boys Dreams Come True—James Ray Fortenberry, second from right, a vocational agriculture student at Pine High School (Louisiana) discusses his supervised farming program with, left to right, Robert Jones, FHA County Supervisor; his father Ray Fortenberry; Ronald Knight, his vocational agricultural teacher; and Mack Hurst, Assistant FHA County Supervisor. James Ray has purchased ten dairy animals through the Farmers Home Administration Young Loan Program and plans to eventually establish a dairy of his own. (Photo from J. C. Atherton, Ag. Ed. Louisiana State University)



A Hedge Against the Possible Food Ages—James Magee, Sr., Vocational culture Teacher at Slidell High School (Louisiana) instructs students in the Preservation Center in his department. (Photo from J. C. Atherton, Louisiana State University)



Agricultural Education

July, 1974

Number 1

Stories in Pictures

by Richard Douglass



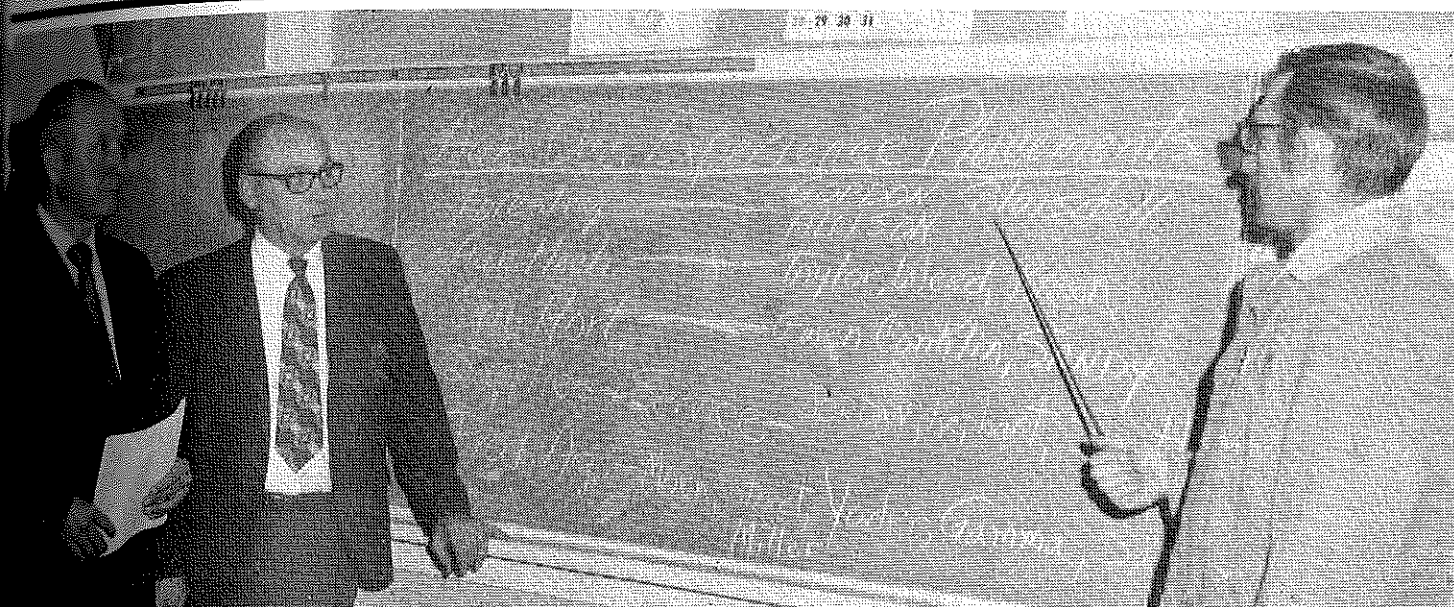
Let's hear it for Clifford Nelson, Vice Chairman of the Magazine's Editing-Managing Board! The Maryland Vocational Association honored State FFA President, Pete Knill (left) with a \$100 U.S. Savings Bond and Dr. Clifford L. Nelson (right) with the Outstanding Achievement Award for 1973 and a clock-plaque. (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 the organization's 25th anniversary. The editor, Dr. Roy Dillon, University of Nebraska received a special citation at the NVATA Convention for outstanding work as editor and for his especially outstanding effort in behalf of the NVATA. (Photo from Sam Smith, NVATA)



Vo-Ag Department Says Thanks—The Delta Vocational Agribusiness Department at Muncie, Indiana awarded an Outstanding Service plaque to a local Chrysler Plymouth dealer for providing the department with three courtesy cars to transport some of the 200 students to FFA events and field trips during the year. Pictured from left to right are Bill Gaddis, Sales Manager; John Jackson, owner of John Jackson Chrysler Plymouth; Keith Fadely, Delta FFA President, and Royce Costin, Director of Vocational Agribusiness at Delta High School. (Photo from Royce Costin)



Theme—PROGRAM PLANNING AND EVALUATION

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