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Types of Evaluation

	Intended	Actual
Ends	To Determine Objectives CONTEXT EVALUATION	To react to attainments PRODUCT EVALUATION
Means	To design procedures INPUT EVALUATION	To use, control & refine procedures PROCESS EVALUATION

**THEME: Evaluation of
Vocational Agriculture**

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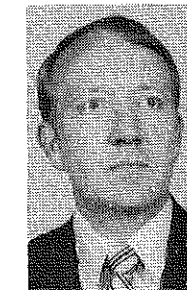
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EDITOR'S PAGE

Documenting Performance



By LARRY E. MILLER, EDITOR
(Dr. Miller is a Professor in the Department of Agricultural Education at The Ohio State University.)

Many evaluation efforts are mandated. The state conducts evaluations in response to federal mandates and to monitor the utilization of state funds at the local level. The local school participates in evaluation for self-assessment and to maintain accreditation.

The local teacher may believe that many of the activities are repetitive and argue that such evaluations take too much time away from students. If we do not know how well we are doing, then how can appropriate goals for the future be established?

Evaluations do take time. However, we can make sure that the time spent ultimately results in improved programs for our students. After all, we need to document our level of performance. The results can often effectively reinforce the points you were trying to make with administrators and policy makers. When these points are made by a review team, they seem to become more valid and carry more punch.

Continuous Evaluation

The teacher who carefully plans programs, continuously gathers information, and maintains an effective record-keeping system will find the evaluation process to be less laborious. Therefore, by careful planning, teachers can

make formal evaluation efforts less troublesome.

Almost every source on evaluation notes that evaluation should be continuous. When we perceive it as an activity which occurs every five or seven years, then activities necessitated by the evaluation become numerous.

Using Results

Evaluation should not be done solely to comply with federal, state or accreditation requests. We should seriously self-evaluate to seek to improve our own teaching and program. We must then be flexible enough to use the knowledge produced, even if it is not what we wanted to hear, to better serve students in vocational agriculture.

THEME

Thinking about Evaluation

Evaluation is used to determine the value or worth of our educational programs. Many of the evaluations with which we are familiar focus upon program processes. "Does our laboratory meet standards?" "Do we have a written course of study?" Some evaluations also look at the results of our instruction. "What is our placement rate?" "How much did our students learn?"

Several years ago Daniel Stufflebeam, then a faculty member in education at The Ohio State University, proposed a CIPP model for evaluation. CIPP was defined as context, input, process and product evaluation. He suggested that we should conduct evaluations to provide information for making educational decisions.

Context

Context evaluations are conducted to determine objectives (The Cover). What are the "intended ends?" This type of evaluation involves needs assessment, input by advisory committees, and thinking about what ought to be. Questions relating to this type of evaluation might include: "What is the major purpose of our program?", "What level of competence should our graduates have?", and "What percentage of our graduates should enter an agricultural occupation?"



By J. DAVID MCCracken,
 THEME EDITOR
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Input

Input evaluations are conducted to design procedures. Similar procedures are used in conducting input and context evaluations. Questions relating to this type of evaluation might include: "How large should the laboratory be?", "Should we have a land laboratory?", "Do we need a computer?", and "What should be the minimum SOEP requirements for our students?"

Process

Process evaluation is used to see if standards are
(Continued on Page 4)

Thinking about Evaluation

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reflected by practice. We use this type of evaluation quite often. "Does our agricultural mechanics laboratory meet state standards?" "Do our students have appropriate SOEPs?"

Product evaluation involves an assessment of accomplishments. "Did we accomplish our intended ends?" "Does our product match our objectives?" "What percent-

tage of our students are placed on-the-job?" "What level of competence did they achieve?"

Model Usage

The CIPP model can be a useful way of thinking about evaluations. It can challenge us to look beyond the normal process and product evaluations and have us ask questions about whether our objectives are appropriate or whether our standards are suitable. Agricultural educators who wish to improve their programs will find that evaluations are an important part of the improvement process.

THEME

Considerations for Improving Local Program Evaluation

Pick up a copy of a current popular magazine or professional journal and there is a high probability that it contains an article lamenting the condition of education in the United States. Much of this public attention can be attributed to A NATION AT RISK (National Commission on Excellence in Education 1983) and about 30 other national studies as well as nearly 300 state task force studies of education that have been released since that time (Cross 1984).

The underlying message of all of these reports has been that there is a drastic need to improve the quality of all our educational programs. The theme of educational excellence must become a visible goal for all of us involved in education.

Although there has been considerable attention to the broad field of education, these national studies have made few references to vocational education — only two have addressed it specifically. These studies are EDUCATION FOR TOMORROW'S JOBS (Sherman 1983) and AN UNFINISHED AGENDA: THE ROLE OF VOCATIONAL EDUCATION IN THE HIGH SCHOOL (National Commission on Secondary Vocational Education 1984).

Existing Evaluation Practices

Since the midsixties, educational evaluation has often been promoted as providing information for improving programs. In vocational education, the federal legislation has required that evaluation activities be conducted regarding the effectiveness of programs. Most states have been responsive to the evaluation requirements of the federal vocational education legislation. Indeed, THE VOCATIONAL EDUCATION STUDY: THE FINAL REPORT (National Institute of Education 1981) concluded that the evaluation requirements of the 1976 amendments had significantly stimulated evaluation activities on the part of states and localities. In carrying out their evaluation mandates, states typically have initiated reviews of their vocational education programs once each five years. This program review has generally included information on program operations



BY N.L. MCCASLIN

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and management, programs, students, staff, and community (Beuke et al. 1980).

The current federal legislation, the Carl D. Perkins Vocational Education Act, indicates that programs should be evaluated as to —

- the occupations to be trained for, which will reflect a realistic assessment of the labor market needs of the state;
- the levels of skills to be achieved in particular occupations, which will reflect the hiring needs of employers; and
- the basic employment competencies to be used in performance outcomes, which will reflect the hiring needs of employers.

Characteristics of Effective Schools

Recent educational research has identified the characteristics of effective schools that tend to influence (academic) performance. Although agricultural education was not the specific focus of these studies, vocational agricultural teachers should consider many of these findings when deciding whether program improvement is needed to achieve educational excellence. In this context educational excellence includes (1) preparing and placing individuals in agricultural occupations and (2) increasing individuals' academic performance.

The literature on effective schools identifies character-

istics that should be considered in evaluating vocational agriculture programs. This process will require agriculture teachers to modify current evaluation strategies and materials. Purkey and Smith (1982) identified 13 separate characteristics of effective schools that encourage academic achievement:

1. School site management
2. Leadership
3. Staff stability
4. Curriculum articulation and organization
5. Staff development
6. Parental involvement and support
7. Schoolwide recognition of academic success
8. Maximized learning time
9. District support
10. Collaborative planning and collegial relationship
11. Sense of community
12. Commonly shared, clear goals and high expectations
13. Order and discipline

Using These Characteristics

There is undoubtedly a need to improve the empirical and theoretical basis for further understanding the characteristics of effective schools. Additionally, agriculture teachers need to determine the appropriateness of effective school characteristics in predicting whether programs are successful in placing students in agriculture occupations and in encouraging academic performance. For the purpose of this article, they will be offered as suggestions for improving and strengthening future evaluation efforts in vocational agriculture. The remainder of this section will discuss evaluation implications of these 13 characteristics.

School Site Management

The amount of responsibility for increasing achievement levels and placement rates that a district gives to each school site has gone without much attention in evaluating local programs. Although participative management and worker involvement programs have increased in U.S. workplaces, few educational agencies have considered this type of involvement by teachers and administrators. A more typical approach has been for boards of education and school administrators to mandate certain changes and expect them to be carried out without much emphasis from teachers. Future evaluation activities should consider where this responsibility is placed within the school.

Leadership

Another area for consideration in evaluation activities is to examine the leadership structure in the school. Who are the leaders in a school district? Are boards of education, administrators, and teachers viewed as having the major responsibility for establishing and maintaining program improvement efforts? The effective schools reports have identified the school principal as a key leader. If changes are to be made in program directions, someone must be at the helm initiating, encouraging, maintaining, and rewarding such efforts. Therefore, evaluation activities should involve the school principal and seek his or her advice.

Staff Stability

Staff stability is another key dimension that should be

examined in evaluation efforts. Have teachers and administrators changed so often that momentum for program improvement cannot be maintained? Have teachers been so stable that no new ideas have been tried? Somewhere in between appears to be the more rational position. However, evaluation activities seldom examine the stability of staff.

Curriculum Articulation and Organization

Curriculum articulation and organization are important dimensions seldom addressed in evaluation as it is conducted today. How do the various curricula (e.g., agriculture, mathematics, science, and English) work together? Not only is scope and sequence an important consideration, but coordination and integration of curricula should also be addressed in future evaluation activities.

Staff Development

Provision for staff development is another area that needs to be considered in evaluation activities. Several questions could be asked relating to staff development. Some examples for you to include are presented. How much attention is given to this topic? Is staff development a continuous activity along the program improvement dimension, or is it sporadic and lacking any apparent cohesion?

Parental Involvement and Support

The extent of parental involvement and support is also rarely examined by addressing certain questions. How many parents initiated meetings with the agriculture teacher? How much and what type of support is generated by parents? How often does the agriculture teacher ask to meet with parents? To what extent does the vocational agriculture teacher visit students' supervised occupational experience programs?

Schoolwide Recognition of Academic Success

Vocational agriculture teachers have extensively used various student recognitions to encourage achievement (e.g., judging contest, FFA awards). However, this recognition has not always been schoolwide. Awards are often given only in the presence of vocational agriculture students. Evaluation activities often include sections on student vocational organizations, but seldom do they address the context in which awards are made.

Maximized Learning Time

The increased pressure for students to take additional courses in science, English, mathematics, and foreign language is causing many vocational agriculture teachers to examine how their students spend their learning time. If students are actively engaged in learning activities 50 percent of the time, the remaining time is wasted. Few evaluations have considered or examined learning time of students. Detailed procedures for determining learning time in vocational classes have been developed by Halasz and Desy (1984).

District Support

A local district generally has little trouble supporting those activities that the school board thinks are important.

(Continued on Page 6)

Considerations for Improving Local Program Evaluation

(Continued from Page 5)

In addition to the financial support for personnel, facilities, equipment, and supplies that are often addressed in evaluation, consideration should also be given to the psychological and philosophical encouragement and support given by administrators, counselors, and other teachers to students participating or desiring to participate in vocational education.

Collaborative Planning and Collegial Relationships

It is generally accepted that changes in educational programs are most effective if those who are affected by the planning and implementing of decisions are involved. If there has been involvement of teachers, administrators, and counselors in arriving at what is to be done to improve the vocational agriculture program, then there is a better chance of developing a unified and common view of needed changes. Evaluations should address the extent of and procedures followed in involving staff in the planning process.

Sense of Community

Effective schools have been characterized as having low levels of alienation. Students, teachers, administrators, and counselors all see themselves as working together. Individuals are not overly protective of their "turf" and are willing to cooperate. Present evaluation activities often overlook this key criterion. Future evaluation should address how well the various actors in the vocational agriculture program work together.

Commonly Shared, Clear Goals and High Expectations

Most present evaluation procedures address goals and objectives. However, attention has generally been given to the type of goals and objectives, and relatively little attention has been given to checking the extent of agreement on them. Future evaluation efforts should check the extent to which administrators, teachers, counselors, students, parents, and employers have achieved consensus on the goals for a vocational agriculture program.

Order and Discipline

In order to provide meaningful learning experiences, some semblance of order and discipline is necessary — this

is not to say a quiet classroom. It does mean that students, teachers, and administrators take their jobs seriously. Future evaluations should examine the level of order and discipline present in the vocational agriculture classroom, and laboratory areas. The clearly defined and agreed upon goals addressed earlier will go a long way in helping individuals find purpose, maintain order, and establish discipline in the school and classroom.

Summary

Evaluation has been an essential part of vocational agriculture for many years. Additionally, teachers have sought input from a number of source. However, the evaluation criteria often fail to include examination of key educational characteristics.

The use of effective schools characteristics in evaluation should result in more meaningful information for improving vocational agriculture programs. These characteristics need to be refined and verified further for our programs. There is no easy or magical way to improve evaluation activities. Why not take one or two of these criteria and try them out the next time you are involved in evaluating your vocational agriculture program.

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1986 Themes

January	Vocational Agriculture and the Excellence Movement	July	Staying Current: Classroom and Laboratory Management
February	Staying Current: Agricultural Mechanics	August	Staying Current: Youth Organizations
March	Staying Current: Agribusiness and Farm Management	September	Staying Current: High Technology
April	Staying Current: Crop and Food Production	October	Staying Current: Small Animals and Specialty Crops
May	Staying Current: Forestry and Natural Resources	November	Staying Current: Professional Affairs
June	Staying Current: Animal Agriculture	December	Staying Current: Horticulture

THEME

Self-Rate Your Program



BY ED OSBORNE

(Editor's Note: Dr. Osborne is an Assistant Professor in the Division of Agricultural Education at the University of Illinois, Champaign, Illinois 61820.)

What you don't observe you will not see. What you don't see you cannot describe. What you can't describe you will not understand. What you don't understand you cannot improve.

Teachers of vocational agriculture often become so involved in their day-to-day activities that they lose sight of their major purposes and goals. When this happens, the big pieces of the puzzle that bring vocational agriculture programs together are easily overlooked or neglected. Before teachers can determine where progress is good and where weaknesses are evident, they need to review the events of the past year.

Claiming ownership of a program causes one to seek excellence, and excellence is usually achieved through continual review and modification. This reflective time is crucial to planning for future success and improvement. The Lions Club pin serves as an excellent symbol of the road to improvement. Two lion heads may be found on this pin; one is looking back and the other is looking ahead. Program improvement occurs by using reflections of the past to form visions of the future.

The process of evaluation demands that the program be studied, that status descriptions be developed, and that elements and situations be understood. This is a process that teachers can accomplish independently by using a simple rating scale to guide their reflections.

Rating Your Program

One piece of evidence useful in planning for program improvement is provided by teacher ratings of their own programs. While working with beginning teachers in Illinois, the evaluation strategy presented in Table 1 was developed. A list of 30 elements which contribute to the success of programs is included in the program evaluation form.

The quality of each element should be rated by the teacher. Once all items on the form have been rated, the teacher should review the list to identify those elements rated fair or poor. For each of these, at least two specific strategies for improving that element of the program should be listed. Seasoned teachers who have completed this evaluation several times may want to raise their standards, such that improvement strategies for elements rated as poor, fair, or good are identified. This process will keep young teachers from feeling overwhelmed, yet provide continual challenge for improvement as teaching experience is gained and the program strengthens.

For example, if "Supervision of SOE programs" is rated fair by the teacher, the following improvement strategies might be identified:

1. establish a system to regularly schedule visits
2. establish and maintain a visitation record system
3. outline an agenda to be followed for visits

In another example, if "Effectiveness as a laboratory teacher" is rated fair, then the following strategies for im-

provement might be identified:

1. present demonstrations when appropriate
2. supervise every student's work in each laboratory period
3. secure project plans for all work in advance.

TABLE 1
Vo-Ag Program Evaluation Form

Direction: Rate the quality of each of the following elements of your program by circling the appropriate response for each item. (Note: P = poor, F = fair, G = good, E = excellent.)

1. Effectiveness as a classroom teacher	P	F	G	E
2. Effectiveness as a laboratory teacher	P	F	G	E
3. Extent to which students are taught principles and practices	P	F	G	E
4. Extent to which technical skill practice is provided	P	F	G	E
5. Quality of students	P	F	G	E
6. Enrollment	P	F	G	E
7. Quality of instruction in day classes	P	F	G	E
8. Up-to-date courses of study	P	F	G	E
9. Connection between SOE and class/laboratory instruction	P	F	G	E
10. Supervision of SOE programs	P	F	G	E
11. Quality of students' SOE programs	P	F	G	E
12. Student participation in FFA	P	F	G	E
13. Quality of FFA program	P	F	G	E
14. Scope of adult programs	P	F	G	E
15. Personal level of technical knowledge and skill	P	F	G	E
16. Personal level of professional knowledge and skill	P	F	G	E
17. Participation in professional organizations	P	F	G	E
18. Order and attractiveness of classroom	P	F	G	E
19. Use of filing system	P	F	G	E
20. Amount/condition of instructional materials and references	P	F	G	E
21. Order and maintenance of laboratory	P	F	G	E
22. Amount/condition of tools and equipment	P	F	G	E
23. Availability/use of land laboratory	P	F	G	E
24. Professional relationship with school administration	P	F	G	E
25. Professional relationship with other teachers	P	F	G	E
26. Professional relationship with students	P	F	G	E
27. Professional relationship with community	P	F	G	E
28. Use of advisory council	P	F	G	E
29. Leadership exerted within community	P	F	G	E
30. Personal attitudes toward teaching	P	F	G	E

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Self-Rate Your Program

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Once strategies have been identified, the teacher should review the list of elements in need of improvement and select three that will receive immediate emphasis. Once the corresponding strategies for these elements have been accomplished, a second set of priority items can be identified, and so on. This technique will reduce anxiety and allow teachers to gradually chip away at the weaknesses in their programs. The need for continual evaluation and improvement will also be reinforced through this process.

THEME

Step-by-Step Program Evaluation

Let me share with you my experiences in learning about program evaluation. My first interest in this topic occurred when I evaluated my educational programs conducted as a County Extension Agent. I would hand out evaluation forms at the end of an educational meeting to get feedback on how the audience reacted to my performance.

Then, in 1976, when the Cooperative Extension Service began to emphasize evaluation and accountability, I increased my awareness by attending several workshops on program evaluation. The first thing that I noticed was that the emphasis at these training sessions was on program impact. My previous experience had been in obtaining reactions from the audience.

The workshops were frustrating to me. Although evaluation issues were raised and information was given, no one was telling me how to go about this process of program evaluation. No one was telling me "how to do it."

I began to read, learn and eventually put my information into a step-by-step process. This step-by-step approach helps me in thinking through or planning an evaluation project. This approach also helps break the complicated process of evaluation down into smaller, more easily digested tasks.

In the last five years, I have had the opportunity to conduct workshops and teach classes in program evaluation. I have found that the largest problem people have in pursuing program evaluation is in thinking through the evaluation process, including: "What they want to find out," and "How they are going to use the information gained from the evaluation."

The theory behind a written-down, step-by-step process is to make a complex task more basic and understandable. The step-by-step process breaks a complex process into smaller units. Dealing with one unit at a time makes the process more concrete, less frightening, more clear, and less frustrating.

The Process

Following is the step-by-step planning process which I

Summary

Periodically, vocational agriculture programs come under the scrutiny of peer or external evaluations, and the results of these efforts are very beneficial. However, teachers can conduct informal evaluations on their own programs that can also yield worthy results. The evaluation scheme suggested in this article could be completed in the spring or summer of each year, with efforts to implement improvement strategies occurring throughout the year. Identifying priority areas for improvements is the key to managing and utilizing evaluation results. The ability to self-evaluate, vocational agriculture programs must be developed and exercised by teachers so that excellence may be achieved and maintained.



By BARB FROKE

(Editor's Note: Ms. Froke is Program Leader in Family Living and Nutrition and a District Extension Supervisor at South Dakota State University, Brookings, South Dakota 57007.)

call "Think It, Then Do It"¹:

Step One. Decide what program or project to evaluate: clarify who the target audience for the program is. Choose a program that is important to you. Write down a description of the program, including subject-matter emphasis, program activities, delivery methods and the target audience(s).

Step Two. Patton² emphasizes involving stakeholders in the planning of program evaluation. He prefers forming a small task force for the purpose of planning the evaluation, with an objective to obtain results which will be useful and used by decision makers. The task force works hand-in-hand with the evaluator throughout the complete evaluation process. The practical theory is that decision makers who are involved in planning an evaluation project will be more committed to use the results.

Therefore, Step Two involves identifying decision makers, information users or other stakeholders — people who are interested in the program and who are potential users of the results.

Step Three. Now, choose your working evaluation task force from the preceding stakeholder's list. This may be only a couple of people.

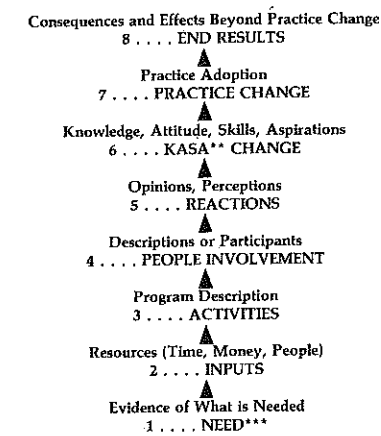
Step Four. List and examine program objectives. Be sure that objectives focus on intended program accomplishments, focus on the target audience, focus on what you expect the audience to know or do, are measurable, and include any criteria or pre-set standards. Rewrite objectives

if necessary. Identify which objectives you want to evaluate.

Step Five. It is helpful to think about other reasons why you want to evaluate the program (beyond measuring objectives). Some people are interested in issues related to program improvement, program impact, program cost, future decisions about the program, potential future programs, and accountability concerns. Make a list of your reasons.

Step Six. Use Bennett's³ hierarchy to further clarify what kind of information you need. His chain of events is very useful (See Figure 1.) in helping an evaluator focus on specifically what information you want. Steele⁴ added the lower step, focusing on needs assessment, which is helpful in context and input evaluations.

Figure 1
Chain of events in Extension programs, a hierarchy for obtaining evidence for program evaluation*



*Adopted from Analyzing Impacts of Extension programs, Extension Service, USDA ESC-575

**Knowledge, attitudes, skills, aspirations

***This step was added to the original hierarchy by Sara Steele, University of Wisconsin, Madison, WI

Step Seven. List the people or groups to whom you want to report the results of the evaluation. It can be useful to identify, beside each person or group listed, the type of information in which you think they will be most interested, using Bennett's chain of events as a guide. If you see a trend developing, you will want to double check to be sure that you pursue obtaining that level of information.

Step Eight. At this point, stop and make sure where you are headed. Review Steps 4-7; then make a list of questions you want your evaluation to answer (what you want to find out). Beside each question, describe what evidence you can gather (how you will know that the question has been answered; what is the result?) Also, list by each question the criteria (what is the standard against which you can judge the evidence or results?).

This exercise is the most frustrating, but the most helpful in the whole process, because it forces the evaluator to get very specific about what information is needed. This step makes decisions about evaluation design and data collection less difficult. Steps 4-7 are really designed to force the evaluator to think through what information is needed, and why, and helps prepare the evaluator to identify the specific evaluation questions and what results will be meaningful (Step 8).

Step Nine. Decide on evaluation methods (design) and data collection procedures. This is often where educators

want to begin in developing an evaluation project. Steps 1-8 are designed to make sure that the evaluator knows what information is needed and how it is going to be used before he begins identifying design and data collection methods.

In Step 9, the evaluator also needs to make sampling decisions and to consider what descriptive data is needed. This is also a good point to determine what resources are needed (staff, money, time, materials, data processing, for example). Then, weigh the potential benefits against the potential costs and decide if you should proceed, adjust or scale down the project, or perhaps even abandon the project if it really is not feasible to continue from a resource viewpoint.

Step Ten. Construct or obtain any needed instruments.

Step Eleven. Pilot test the chosen evaluation procedures and instruments.

Step Twelve. Stop and ask yourself two questions: Will the results from these methods be meaningful and believable? Will the results be useful? Go back, review, and revise your plans if you answer no to either question.

Step Thirteen. Conduct the evaluation.

Step Fourteen. Summarize and study the results of data collection. Plan, before the evaluation is conducted, how you will tally, summarize and interpret the results.

Step Fifteen. Plan ahead an outline of what the written report will include. Determine if you will want to use photographs.

Step Sixteen. Also plan ahead how and where you will report the results. List the individuals or groups to whom you will report, the format to be used in the report and when, where and how you will present the results or report. The latter two decisions are directly related to the particular audience to whom you are reporting.

Step Seventeen. Recognize and thank those who have assisted with the evaluation.

Step Eighteen. Evaluate your program evaluation experience, making notations as to what worked and what you would do differently when pursuing a future evaluation project.

Step Nineteen. Celebrate the completion of your work and the fruits of your effort!

Some Advice

The danger in using a step-by-step approach in planning an evaluation project is that some steps may not apply well to a particular project. Each project, is unique. If a step does not make sense for your project, you may want to skip or revise it. Nevertheless, the process described through the nineteen steps does result in a logical and complete planning process.

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¹Froke, Barbara. Think It, Then Do It, a Step-by-Step Process for Program Evaluation for Use by Cooperative Extension Service Staff, Cooperative Extension Service, South Dakota State University, Brookings, SD, Revised November, 1984.

²Patton, Michael Quinn. PRACTICAL EVALUATION. Beverly Hills: Sage, 1982.

³Bennett, Claude. Analyzing Impacts of Extension Programs, Extension Service, U.S.D.A., ESC-575.

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Advisory Council Assistance with Evaluation

Evaluation of vocational agriculture programs should be enthusiastically accepted and sought after by the instructor. If handled properly, program evaluation enhances the chances for support from the entire community. More specifically, input sought from parents, students, community leaders and school administrators will assist the vocational agriculture instructor to change the program for the better.

As a result, the instructor will likely notice an increased or renewed level of job satisfaction and security. Conversely, evaluation methods that do not address student and community needs may invite criticism or questions of accountability. Some types of criticism may be warranted, and other types may simply be a result of poor public relations, or possibly, mismanaged priorities in the vocational agriculture program.

In these latter cases, the instructor may become frustrated, especially if he or she is presently handling a heavy workload. Competent vocational agriculture instructors will avoid such frustration by recognizing that evaluation may be used as preventive medicine to minimize the risk of neglecting the student's and community's needs and desires.

Revitalization

Vocational agriculture departments are accountable for the secondary and adult education needs of the community. Therefore, it is only logical that evaluation of your program may be best measured by those people it serves. The citizens of your community provide a wealthy resource for your program. Implementing a professionally operated advisory committee may be the single most important decision made by the vocational agriculture instructor. It is the instructor's responsibility to assure that



Vocational agriculture students are taught safe practices by advisory committee members.



By ALLAN NELSON

(Editor's Note: Mr. Nelson is the Vocational Agriculture Instructor at Jesup Community School, Jesup, Iowa 50648.)

an active advisory committee exists and that it provides for continuous evaluation.

The Jesup Vocational Agriculture program took three steps to revitalize its advisory committee. These steps resulted in specific actions for improving the Jesup Vocational Agriculture Program.

Before taking any of the steps identified below, the instructor should be sure to communicate with the appropriate school officials on plans for advisory committee activities. Keep communication channels open by notifying school officials of preparation for and results of each advisory committee meeting.

STEP 1: After approval from your school officials, identify and invite prospective and past members to an organizational meeting by written notice. It is important to be personally acquainted with prospective committee members in advance. Remember, a committee member should be selected due to interest and a unique perspective about the program.

Begin by providing written invitations, including a suggested agenda itemizing purposes of the meeting. Include what the committee is to establish and implement procedures for the election of a chairperson and secretary.



Advisory committee members are responsible for planning adult farmer classes.

Prior to the officer election, prepare a written statement of advisory committee purposes and answer questions concerning member roles. Provide time for introductions and to establish acquaintances between new and old members early during the initial meeting. Explain election guidelines outlining a democratic procedure utilizing proper parliamentary procedure. The advisory committee will begin to function democratically after elections. Until officers are secured, the advisory committee may be somewhat limited to listening rather than advising.

Subsequent to elections, have further business prepared in a form to allow your new chairperson to begin presiding immediately. An assessment form may serve as a means to initiate committee questions and responses resulting in lively and active discussion during the first meeting. To secure evaluative forms, contact your state supervisor. Many evaluative questionnaires, guidelines or standards are available for vocational agriculture. Always include "Other Business" on the agenda to encourage a systematic method for committee input. Prior to adjournment, determine the time and place of the next meeting. Further, briefly discuss and propose items of business for the next meeting. The proposed items of business should be finalized by the instructor and committee chairperson.

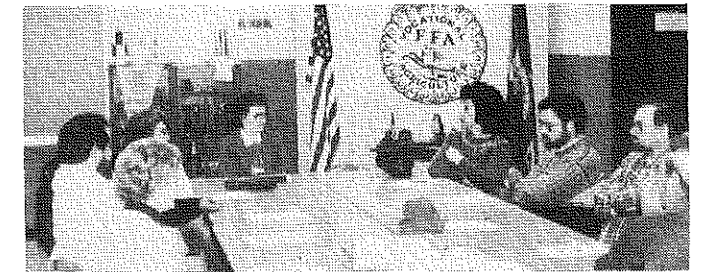
If necessary, teach members to follow parliamentary procedure for reports, old business, new business, etc. Remember to always send written notice in advance including the proposed agenda to your members. The notice should also request that your members contact you if they are unable to attend. Telephone calls are helpful reminders of meetings.

STEP 2. This step involves the identification of advisory committee purposes and working relationship with the school. To initiate Step 2, prepare a draft letter to the school board stating the specific advisory committee purposes.

The letter should request approval for its services concerning development, operation, and evaluation of the vocational agriculture program. Indicate that the advisory committee is intended to supplement and stimulate other types of citizen participation from your community. Further, state that the committee will be expected to serve under the guidelines adopted by the school board and that the vocational agriculture instructor shall be appointed the responsibility of working with the committee. State that all channels of communication shall be open between the school, advisory committee, and community.

Outline that the advisory committee shall perform the following duties: 1) study and survey educational needs of students, 2) develop, analyze, and make recommendations, 3) work cooperatively with administration, instructional and non-instructional staff, 4) facilitate communication between the instructor, adults, and employers in the community, 5) study the effect of vocational agriculture instruction on graduate's employability and transition toward further education, 6) serve as a sounding board for opinion proposed by the instructor and 7) initiate studies and proposals for program improvement.

The "Statement of Purpose" letter should be refined by your advisory committee members during a regular meeting. Present the final letter to the school board and



The meeting room for advisory committee meetings should be arranged in a manner to optimize interaction of all members.

nally to provide continuous recognition of purpose and working relationship with the school.

STEP 3: The final step in establishing or revitalizing the local vocational agriculture advisory committee is to develop committee guidelines. Guidelines assure the committee's proper and continuous operation.

A condensed version of the Jesup Vocational Agriculture Advisory Committee membership guidelines are: 1) follow adopted school board policy, 2) comply with state and federal mandates inhibiting discrimination practices, and encourage appropriate representation of male, female, and target group populations, 3) consist of up to 15 members within the school district, 4) secure new member candidates by a process of identification by the instructor, approval by the administration and acknowledgement by the school board, 5) officially appoint members by a letter of appointment secured by the school superintendent and school board president, 6) membership terms limited to three consecutive years and a maximum of two terms per member, 7) election of a secretary and chairperson to record minutes and preside over meetings, 8) provisions to hold annual elections of officers nominated by members present at the first meeting subsequent to January 1 of each year, 9) follow a planned agenda, 10) meet a minimum of four times per year, 11) provide information to the school board and community regarding their actions, proposals and findings, 12) provide names of retiring members to the school board for service recognition, and 13) reserve the right to evaluate and make changes in the committee guidelines as authorized by the school board.

Conclusion

An advisory committee is not a substitute for any other means of evaluation. Instead, other forms of evaluation may enhance the advisory committee's performance and productivity. Inviting consultants, administrators, FFA members, alumni, etc., may provide the impetus to make your community members work harder to benefit you and the community.

If your advisory committee is dedicated and well organized, you may actually increase your instructional productivity, community involvement, and concentrate on problem solving without increasing your workload! Committee evaluation of program priorities makes it possible to concentrate on what is important to your students and community.

Vocational agriculture instructors with successful programs know the value of evaluative input from associates in their communities. Now is the time to establish or revitalize your vocational agriculture advisory committee!

Using An Advisory Committee in Evaluation

Advisory committees consist mainly of individuals representing the local business and industry. Members also can be parents, students, school staff, employers, industry personnel and teacher educators. The purpose of the advisory committee is to guide the planning and operation of the vocational program. Advisory committees can assist in evaluating your program by participating in: job placement, skills contests, state coordinated reviews, and advisory committee meetings.

Evaluation Through Job Placement

Job placement is an activity whereby students in vocational programs can spend time employed in an industry related to their area of training. What are the purposes of job placement? There are many benefits: providing the student with opportunities to observe and adjust to industry practices and standards, providing employability experience and lessons in human relations skills, etc.

An important benefit to the teacher is that it helps in tailoring the vocational program to the needs of industry. Job placement gives the teacher the opportunity to work closely with employers.

The employer agrees to help the student develop a training plan which describes tasks and skills to be learned, assists the student in job development and growth, and assists the instructor in evaluating the student. If employers are to perform this job, they must be aware of student growth and progress. Employers observe first hand the technical knowledge and skills being taught in the vocational program.

Early placement also requires regular contacts and reports. This gives the vocational teacher frequent contact with employers through job visits and phone calls. The teacher should inquire about student performance, skills learned, and needed areas for student improvement.



Employers are a key factor in evaluating students' on-the-job performance.



By PAMELA SNYDER AND SUSAN CRANK

(Editor's Note: Ms. Snyder and Ms. Crank are Vocational Agriculture Instructors of the small animal production and management program at Northwest Career Center, Columbus City Schools, Dublin, Ohio 43017.)

Advisory committee members are the individuals in the industry who may be employing many of your students. They are the ones to advise you of program strengths and weaknesses, make recommendations, and continue to hire your students because the students meet their demands, hence the industry demands. With the constant changes in industry, advisory committee members can inform you of changes in industrial equipment, products, technical information and skills.

Our employers make recommendations to our Animal Production and Management program regarding curriculum changes and laboratory experience. As a result, we have increased the number of aquarium tanks and species of fish in the school pet shop. Grooming shop employers recommended changes in the grooming skills students should possess, which we have incorporated into our grooming shop. Other employers recommended more emphasis in human relation skills. All provided important feedback for our program.



A skills contest is one way that advisory committee members can be used.

The best program evaluation you can have as a vocational teacher is for employers to contact you year after year to hire your students because they have the necessary attitudes, skills, and training for the job.

Evaluation Through Skills Contests

Another way that advisory committees can be used in program evaluation is through contest preparation and competition. Even though many vocational agriculture teachers spend a great deal of time and effort preparing for contests, we feel that too many teachers do not reap full benefit from these contests.

In the Animal Production and Management taxonomy, we have five different skills contest areas that represent five different types of skills that students will need on-the-job. These five areas are pet shop, dog grooming, dog obedience, business management, and animal health. It is possible to involve advisory committee members in all phases of the contest preparation and competition.

What better way to truly make these contests a reflection of industry standards? If these contests help us measure accurately and gauge where student performance levels are, then the contests can indeed be used as a way to evaluate the program. Advisory committee members can and should be used to define what the contest should be and to prepare and administer them.

On the local level, we use our advisory committee members to help prepare our students for contests. This is an excellent way for industry people to see what is really happening in the program, and what the students really know. We have also received very good recommendations on supplies and equipment or practices that need to be updated during some of these visits. Another fringe benefit for the students is that these visits can serve as a kind of hands-on job interview.

The final way we use advisory committee members to help with our skills contest is through the judging of the actual contest. Again, this is another chance to get advisory committee members into the program, and measure the students by industry standards. All of the methods are ways that advisory committees can be used to evaluate vocational agriculture programs through the use of skills contests. It should also be mentioned that any use of an ad-



Asking advisory committee members to perform demonstrations is a way of involving members in your program.

visory committee that gets the members involved in the program will be useful in evaluation. Examples of other ways that the members could have direct contact with the students would be through field trips, having members in as guest speakers, etc.

Evaluation Through State Reviews

Program Review for Improvement, Development and Expansion (PRIDE) is an evaluation method that Ohio uses in vocational education. The article in this issue by Cummins and Sterling describe the PRIDE process. Advisory committee members are good candidates as members of the PRIDE committee. The use of active advisory committee members who possess a working knowledge of the program will give the vocational teacher valuable information and suggestions for development of short term and long term goals for improvement.

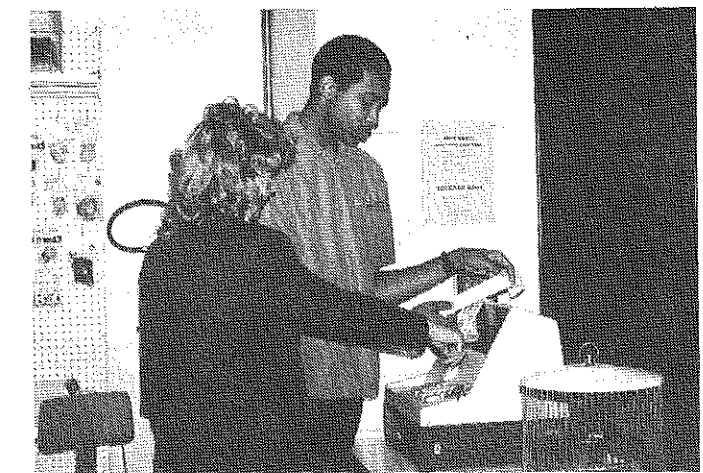
Advisory committee members also benefit from PRIDE. Their input and recommendations are used by the local school to make necessary changes to get the program in line with industry standards, thus providing more capable and productive employees. Consequently, employers are more willing to hire program graduates. Because industry personnel can see their ideas actually being used, they are more willing to help the program through activities such as field trips or demonstrations.

Evaluation Through Advisory Committee Meetings

One of the more traditional methods of using an advisory committee to evaluate programs is through advisory committee meetings. We choose members of our advisory committee in a variety of ways. All are known in our community as being leaders in their industries. Many are active in their professional organizations and have become known to us in this way. Others have a special interest in helping students learn and have offered their help. Still others are recommended to us by current members.

We try to bring in one to two new members every year, while letting some previous members have a rest. This way, no one gets burned out, and we have an influx of new

(Continued on Page 14)



Advisory committee members can give advice on equipment, practices or supplies which may be unfamiliar to the teacher.

Using An Advisory Committee in Evaluation

(Continued from Page 13)

ideas. We also get a better cross-section of the industry people and/or potential employers in our area.

An important part of any evaluation is the setting of goals. They give guidance to the instructors on the direction of the program. During a formal meeting (as opposed to an informal visit), goals are more likely to be established.

Because the careers for which we train are so diverse, we divide our advisory group into smaller sub-groups of three to four people each. For example, we have three dog groomers, four pet shop representatives and four people representing different segments of the animal health industry (private practice veterinarian, technician, researcher, etc.).

With the smaller groups all having the same interest areas, the suggestions can be more specific and the discussion can get to the important details much more quickly

than would occur in a large group. It also makes better use of the member's time. The one disadvantage is that it does take more time on the part of the teachers and administrators.

We have also found, in comparing our advisory committee meetings to a state coordinated evaluation (PRIDE Review), that the suggestions made from our advisory committee meeting tend to be more specific and shorter term in nature. We credit this to the less structured, less formal approach that the advisory committee meeting offers.

Conclusions

There are a variety of ways that advisory committees can be used to aid in the program evaluation process, some of which many vocational agriculture teachers may overlook. As instructors involved in a continuing evaluation process, we need to look at the bottom line. This bottom line should not only be "are we going about things in the right way?", but major emphasis should be given to "are our students employable in entry level positions, as measured by industry standards?"

provement, Development, and Expansion of vocational education. This comprehensive self-review by local personnel is followed by a state review involving students, teachers, counselors, school administrators, lay citizens, employers, and state supervisory staff from the Division of Vocational and Career Education.

PRIDE provides usable information to vocational decision makers for the improvement of vocational programming for youth and adults. The agricultural and other vocational services review includes the instructional program objectives and the process variables of (1) curriculum and instruction, (2) facilities and equipment, (3) staff, and (4) student assessment.

The role of the administration is also examined. The availability of vocational agriculture and its impact on the community is assessed. Finally, the evaluation results in recommendations for change for program improvement to decision makers. In addition, a year later, a follow up is conducted to determine what changes have been made and what action still needs to be taken to have more effective vocational agriculture programming for youths and adults.

Operational Phases

Implementation and preparation for PRIDE includes collection of school district and instructional program data and information. To facilitate the review, self-review committees of six to eight persons study: (1) instructional programs, (2) adult education, (3) guidance, (4) administration, and (5) special needs and career education.

The self-review committee examines specific programs. Then, the committee completes a report which is forwarded to the local district superintendent, area coordinator for PRIDE, and the respective state supervisory staff member for their perusal. The state supervisor makes an on-site visit to the local program to review and discuss the findings with the local agriculture service representative and the area chairperson for agriculture. After the state supervisor has completed the on-site review, the local and state comments are summarized into a final report for local district, area, and the state.

To provide you with a more comprehensive idea of PRIDE, a chart (Figure 1) which is utilized during orientation of local personnel is included for your convenience.

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THEME

Evaluation Results in Program Improvement — A Statewide Perspective

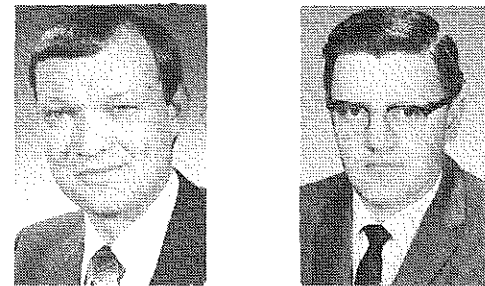
The rationale for program evaluation is program improvement. It may be conducted by staff from the State Department of Education, school administrations, advisory committee members, or accrediting agencies. The more people who become involved in the evaluation process, the more ideas are likely to be gained for program improvement.

The Charge

State and local program administrators are required to investigate and report the status of their programs periodically. The philosophy, goals, and objectives of the state and/or district must be reviewed and a determination made as to the status of the program. Teachers and administrators often feel threatened by the evaluative process, and they discover that outside observers evaluate a program much differently than they themselves perceived it!

There are many models regarding program evaluation and there are many areas within a total program that should be evaluated. Some of the most common areas are: course of study, facilities and equipment, instructional staff, classroom and laboratory instruction — secondary & adult, supervised occupational experience — secondary & adult, student organizations — FFA and YFA, and placement of graduates.

In Ohio, 20 percent of the vocational programs are involved in an in-depth review annually. This program



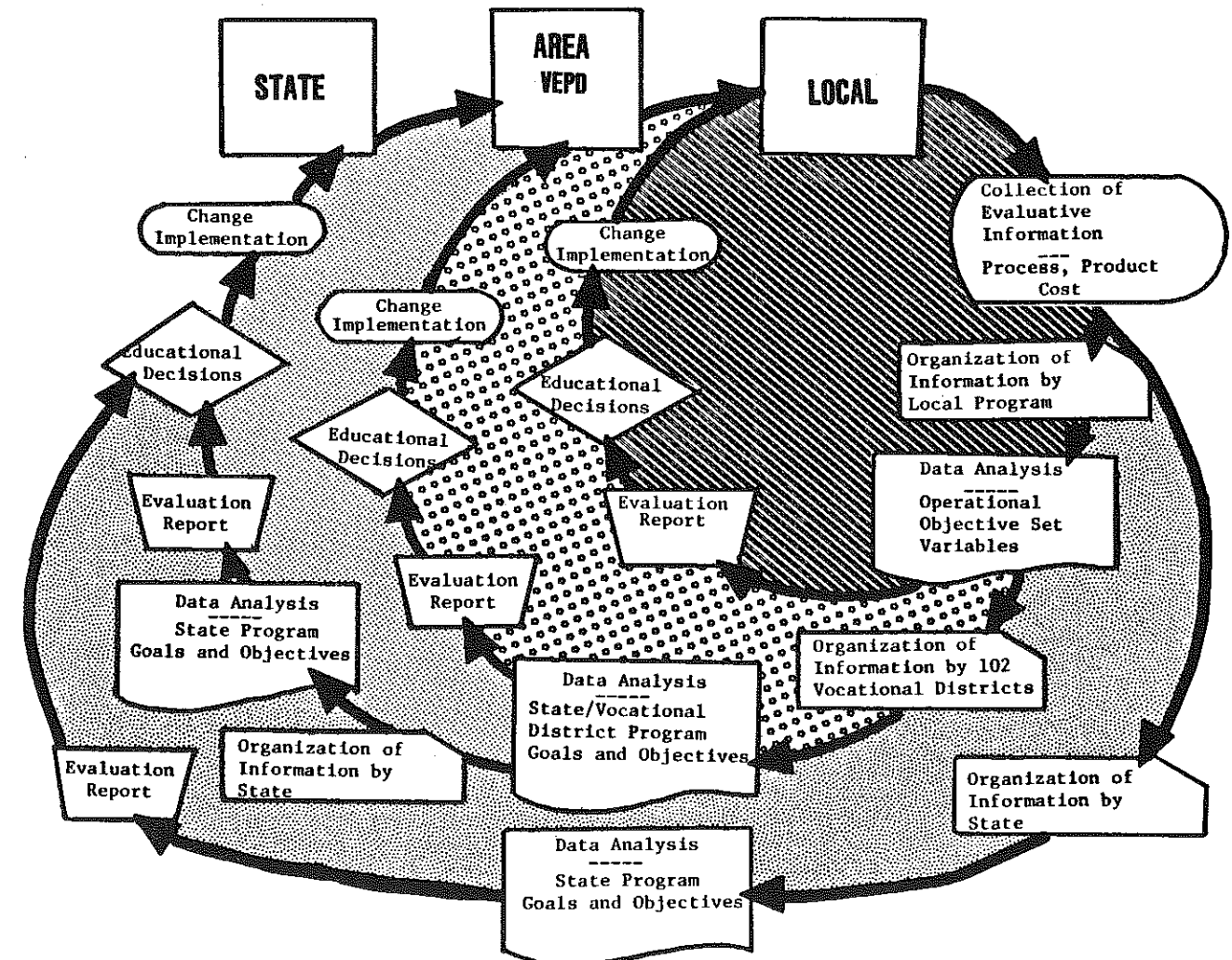
By JAMES CUMMINS AND GEORGE STERLING
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review is intended to comply with and satisfy (1) the "Minimum Standards for Ohio Elementary and Secondary Schools," Sec. 3301.07 ORC and Procedures for Evaluation, Sec. 3301-35-07 ORC; the "Ohio State Plan for Vocational Education 1986," Section 9.17; and the Carl D. Perkins Vocational Education Act 1984, PL 98-524 Sec. 113(b)(9).

Pride in Ohio

PRIDE is an acronym for Program Review for the Im-

PRIDE SYSTEM



Evaluation Results in Program Improvement — A Statewide Perspective

(Continued from Page 15)

As you scan the chart, notice that each local district collects evaluative information, processes it, and makes recommendations. Area reports are used to provide accountability information for local, state, and federal funding. The recommendations may involve funding or professional development. Other recommendations may be forwarded to the State General Assembly for legislative activity. However, the ultimate gain from PRIDE, as visualized on the chart, is the myriad of persons who are involved to make programming more effective.

Results

As one may imagine, the findings, recommendations, and results of PRIDE from a statewide perspective are beneficial. Several findings from last year are: (1) budgets have now been established by 36 percent of the local school district to purchase consumable supplies and additional equipment as needed; (2) housekeeping in the laboratory is a common problem.

Recommendations included: (1) twenty-five percent

more adult education is needed in all agricultural taxonomies; (2) more teacher time must be budgeted and used properly to supervise the occupational experience of students; (3) all programs need to make better use of advisory committees on a regular basis to obtain up-to-date technical information to teach high school youth and adults.

Results of PRIDE include: (1) five local schools have finished major facility changes to comply with minimum standards; (2) courses of study were in some stage of development on the part of nearly all teachers; (3) most schools are establishing annual curriculum materials budgets of \$900 per program area; and (4) eighty-nine percent of agricultural graduates at the secondary level are employed.

So What?

The end result of program evaluation should be the formation of a long-range plan to better meet the needs of the community served by the program. Realistic goals and effective ways and means are the result of a good evaluation! The process is on-going and leads to constant upgrading and improvement. This improvement will bring about better skill development, teachers, and programs.

THEME

Accreditation Evaluation Helps Improve Programs

Three methods of accreditation being used in Ohio Vocational Agriculture Programs are North Central Association, PRIDE, and the National Chapter Award Program.

North Central Association

"The purpose of the Association shall be the development and maintenance of high standards of excellence for universities, colleges, and schools, the continued improvement of the educational program and the effectiveness of instruction on school and college levels through a scientific and professional approach to the solution of educational problems, the establishment of cooperative relationships between the schools and colleges and universities within the territory of the Association, and the maintenance of effective working relationships with other educational organizations and accrediting agencies" (Articles of Incorporation of the North Central Association).

The North Central Evaluation process is a very thorough evaluation procedure which typically instills the knowledge of three professionals in each program area. In this group would be one highly regarded agriculture community person; one practicing vocational agriculture teacher; and one expert, such as someone from the university agricultural education faculty.

The first step of the evaluation is a thorough pre-evaluation completed by the program instructor. This pre-evaluation covers many aspects of the vocational agriculture including organization, physical facilities, in-



BY SAM CUSTER

(Editor's Note: Mr. Custer is the Vocational Agriculture Instructor at Versailles High School, Versailles, Ohio 45380.)

structional staff, materials, methods of evaluation, outcomes, and general characteristics of the program.

The second phase of the evaluation calls upon the three professionals to visit and evaluate. Their first task is to review the pre-evaluation summary and then complete their own summary of the program over a period of one school day and one nonstudent day. All phases of the program are examined during this time, including an evaluation of the FFA.

Upon completion of the professional evaluation, this committee meets and develops a general description, a list of commendations, and also a list of recommendations that they feel are necessary for the improvement of the program. The recommendations are then ranked by school staff in three categories: those to be completed immediate-

ly, short-range calls (within one year), and long-range calls (within seven years). All recommendations are expected to be completed by the next North Central Evaluation, which is in seven years.

High ratings are needed to remain accredited by the North Central Association. Although this is a somewhat lengthy process, it seems to have the most impact upon administrators and boards of education.

PRIDE

This program is designed to improve the quality of Vocational Education and Guidance throughout the state of Ohio. This process is described in the article by Cummins and Sterling in this issue.

National Chapter Award Program

The objectives of the National Chapter Award Program are to improve a chapter's program of activities, assist chapters in evaluating their accomplishments, and provide recognition to chapters for providing educational experiences for the entire membership.

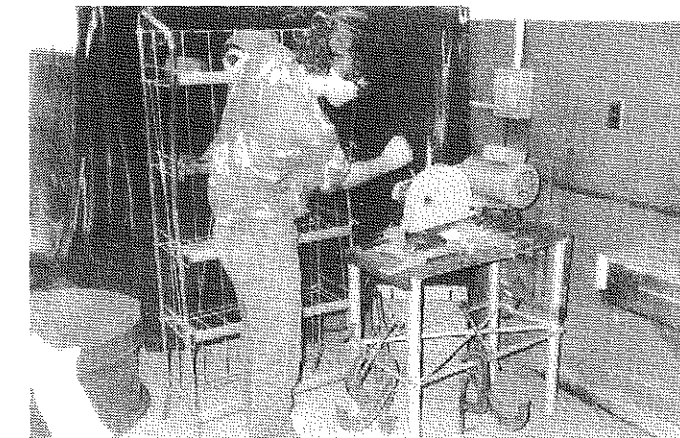
Evaluation is based in two different areas. The first area is to obtain a Superior Chapter rating. To receive this distinction, the chapter must complete a checklist covering the 11 standing committee areas. Each area must have one check, and the chapter must meet 40 of the 47 standards.

The second area is the National Chapter Area. This evaluation is also based on the 11 standing committees but requires much greater detail. In each area, major activities must be documented by numbers of participants, descriptions of activities, and a photograph of the activity. This form is scored and recorded on the state level.

Accreditation Tools

The PRIDE review is the only accreditation tool that must be completed by all vocational agriculture programs. It is also the process which is the most thorough and gets the most results, based on the fact that the State Department of Education staff makes the final recommendations.

Much merit should be given to the North Central



We must maintain the highest quality instruction possible for students using the newest methods.

Association evaluation process. This, of the three processes, is the only one that brings evaluators into the department for major evaluation for more than a short time span. There is less pressure than with PRIDE for implementing the recommendations, however.

The National Chapter Award Program is a good tool for evaluating the FFA but neglects the remainder of the program. This evaluation process does not deal with recommendations, so therefore improvements are based on the chapter's desire to score higher in competition.

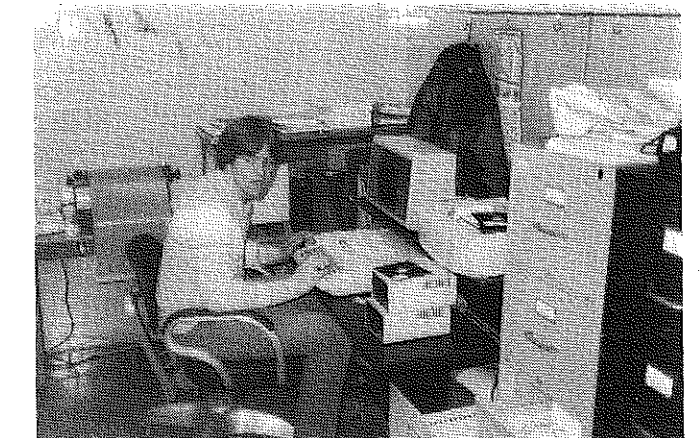
If we look at our present evaluation processes, much emphasis is placed on five-year placement records in the technical area trained. Many states are looking toward 60 percent placement to justify the program and toward meeting state-set standards with no regard for community needs, i.e. building size, numbers, etc.

If we analyze what employers are looking for in employee prospects, citizenship qualities are at the top of the list with technical knowledge being lower on the list. In the future, maybe we should work on meeting the needs of the community and not become so committed to the pre-set state standards that are developed to supposedly meet all people's needs across the state and nation.

Much time has been spent in the discussion of competency testing for teachers. We may want to consider this as an extra tool in the evaluation process for the total program. The community might be able to provide the largest and most innovating facilities but not provide the most adequate instructor for the facilities and therefore not be able to provide for a total program. The current evaluation processes put much more emphasis on the size of the building and amount of equipment than is put on the instructor.

An ideal evaluation process might include the following: physical facilities, curriculum and materials, teacher (competency test), formal evaluation of the FFA, and community needs fulfillment.

It is important that we remember that accreditation evaluation processes are a reinforcement of a good program and deal with program improvement.



Evaluations are one method of maintaining safe and appropriate equipment in agriculture facilities.

Evaluation Programs for Handicapped Students

Handicapped students may differ extensively from their non-handicapped peers, and as a result, the process used to evaluate their programs is rather unique. However, the specific evaluation criteria depends largely on the severity of the students' handicap. To evaluate vocational agricultural programs having an enrollment of handicapped students, the following criteria must be considered: the program goal(s), the performance objectives of the courses being taught, the caliber of students mainstreamed, the teachers' level of competence, the physical facilities, the instructional program, and job placement.

Program Goals

The goal of the program must be to prepare persons (the severity of the handicap taken into consideration) for entry or advancement in an occupation. Furthermore, the community's philosophy in which the learning center is located should be taken into consideration when designing the goal. Finally, the program goal must be in compliance with all of the PL 94-142 federal regulations regarding the education of handicapped students.

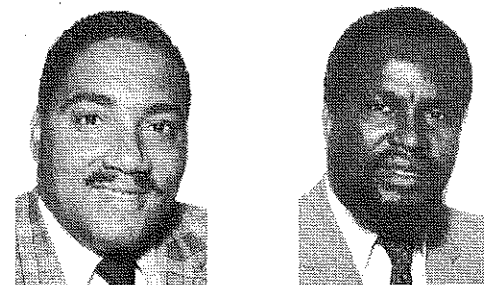
The Teacher

A good teacher of the handicapped will take advantage of staff development activities such as workshops, seminars and tutorial courses. The teacher must meet the following competencies:

1. Be able to select a variety of teaching methods.
2. Provide students with an opportunity to socially interact and adjust to their peers.
3. Utilize resources and persons in special education.
4. Acquire, adapt and develop instructional materials for exceptional learners.
5. Take advantage of community resources such as volunteers in the learning process.



Handicapped students are taught how to assemble and disassemble the lawn mower.



By OSCAR POTTER AND CHRIS IGODAN
(Editor's Note: Drs. Potter and Igodan are Instructors in the Palm Beach County School System in West Palm Beach, Florida 33401.)

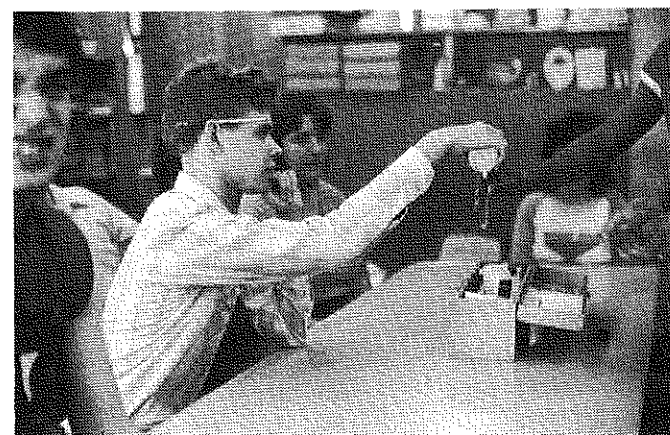
6. Work collaboratively with parents and guardians in order to modify unaccepted behavior.

The Physical Facilities

Any school housing handicapped students must be adequate. Work benches, stalls, aisles and safety features must be installed to accommodate both handicapped and non-handicapped students.

Restroom facilities should be equipped to accommodate the physically handicapped students. Work areas should be spacious enough to carry out assigned activities both in group or individualized instruction. Equipment should be well anchored and color coded in order to meet adequate shop safety standards.

The teacher should demonstrate repeatedly the proper use of each piece of equipment before students are permitted to operate them. The teacher should emphasize the im-



Handicapped students are taught to test soil for determining N.P.K. availability and pH reading.

portance of keeping work benches clear of materials or any other machinery not in use. Since teachers are held liable for their students' safety, it is imperative that mainstreamed handicapped students be supervised at all time.

Performance Objectives

The performance objectives should be related to the students' individualized educational programs (IEP's). They should be sequential in nature and stated in measurable terms with a minimum criteria for mastery.

The Students

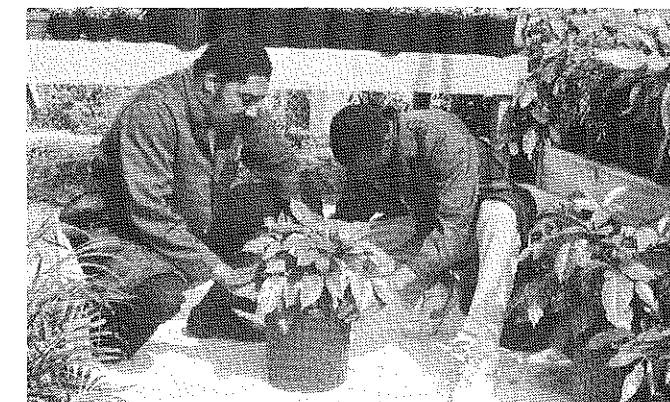
Students are the most important and visible part of the program and in its evaluation process. They should be homogeneously placed according to the severity of their handicap. This will allow the teacher to adequately prepare a set of instructions for a given group, taking into consideration all limitations due to level of disability. For example, a teacher should not assign a student that is confined to a wheelchair to a task involving lifting or carrying heavy objects.

Class size will have an effect upon classroom management. The size of the classes should be small enough to allow for individualized instruction whenever needed. The teacher must be able to assess student progress in terms of both process and product. The teacher's evidence of student progress will usually be recognized through teacher observations of tasks, activities and projects to meet the needs of the handicapped students.

The local school district should comply with criteria relating to handicapped students' placement. This criteria should state explicitly the minimum standards or competencies needed before students can be mainstreamed into vocational agriculture.

The Instructional Program

The classroom teachers must use all available resources when planning instruction for the handicapped. Teachers must allow additional instructional time for handicapped students because of their varying levels of ability. Students' interest, present level of performance and motivation must be taken into consideration by the teacher when planning instruction.



Individualized instruction is often given to handicapped students as shown in this photo.

Job Placement

Finally, in the process of evaluating programs for handicapped students, job placement standards must be considered. Job placement is considered after an individual has acquired competencies in a selected occupational proficiency area.

In the future, all vocational programs in Florida must comply with the recent state legislation (1984 Omnibus Education Bill). One of the provisions is that, beginning with the 1985-86 school year, vocational programs with less than a 70 percent placement rate for three consecutive years will be ineligible for future state funding. This allows for accountability of teachers to their programs and ensures that every effort is being taken to place students on-the-job. Lately, the taxpayers have considered this final criteria to be a high priority. Perhaps the reason for this is because it reflects the cost effectiveness of the programs. A future responsibility assigned to educators is job placement of their students.

Conclusion

The criteria discussed in this article will provide special program educators with information necessary to improve existing programs for handicapped students and also set standards for future programs. In the future, these criteria will have a significant impact on how the programs will receive funds.

BOOK REVIEW

STRUCTURE AND DEVELOPMENT OF MEAT ANIMALS by H.J. Swatland, Prentice-Hall, Inc., Englewood Cliffs, NJ 07632, Copyright: 1984, Number of pages: 436, Price: \$38.95.

STRUCTURE AND DEVELOPMENT OF MEAT ANIMALS emphasizes the muscular and structural development of farm animals. It addresses the subjects of muscular growth, structure of carcasses, and properties of meat. The text details the growth and development of muscles with sections devoted

to bones and structural development. Present situations indicate a need for improving the skills necessary for students to enter fields in animal husbandry. This text would be a good reference for individuals entering meat studies or veterinary science. The wording and terminology used in the book are probably best suited for college level students.

For high schools offering meat classes there are sections on slaughter, cuts of meat and grades of animal car-

casses with very detailed explanations. Through the use of these materials a student could learn the principles of meat cutting and identification of muscles for commercial processing. This text would benefit students who are interested in meat cutting or animal science. It would make a good reference for the vocational agriculture classroom.

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Evaluating Agricultural Mechanics Programs

Outstanding agricultural mechanics programs have two things in common; careful planning and effective evaluation. Regardless of the scope of your instructional program in agricultural mechanics, there are some basic questions you need to consider in effectively evaluating your program: (1) Is the program of agricultural mechanics designed to meet the needs of your students, (2) Do you have a one-year plan and a five-year plan for the mechanics programs, (3) Are your facilities up-to-date, (4) Are they safe, (5) Does your agricultural mechanics facility present a positive image of your programs, (6) Are you teaching your students to be safe workers, (7) Do you incorporate agricultural mechanics into student supervised occupational experience programs, (8) Do you teach agricultural mechanics or conduct an open shop, and (9) Do you have the necessary expertise?

There are no right or wrong answers to these questions, nor are these the only questions you should be asking. However, by asking these questions, you are on your way to providing a meaningful evaluation of your program of agricultural mechanics.

Meeting Student Needs

The important factor in your evaluation is whether your program is designed to meet the needs of your students. No one is better able to design your program to meet your students' needs and design your program accordingly. Do not expect a program designed by someone else to be effective for you and your students.

Planning

The next consideration for evaluating your agricultural mechanics program is the extent to which you are planning ahead. Do not expect to have the facilities, expertise, or in-



By JOE G. HARPER

(Editor's Note: Dr. Harper is an Assistant Professor of Agricultural Education and Communication in the College of Agriculture at the University of Nevada, Reno, Nevada 89507.)

structional materials in an area such as hydraulics five years from now unless you start to plan now.

Do you have a one year plan, a five year plan, what instructional units are you going to include, and what equipment and machinery are you going to need in the future. If you can not answer these basic questions, then you need to do a better job of planning. Remember, you need a plan to get ahead, set goals, just as you teach your students to do.

Facilities

The next aspect of your evaluation should be concerning your teaching facilities. Do you have enough equipment, is your laboratory well organized for effective instruction, and is your facility a safe place for your students to learn?

A good resource to use in your facility evaluation are the guidelines established by Bear and Hoerner (1980) in their reference *PLANNING, ORGANIZING AND TEACHING AGRICULTURAL MECHANICS*. They have set some very useful criteria for determining if agricultural mechanics facilities, including tools and equipment, are adequate.

No evaluation of agricultural mechanics facilities would be complete without full consideration for student safety.

All facilities should be evaluated for proper safety equipment, equipment adjustments and shielding, color coding, storage of hazardous materials and personal protective devices.

Positive Image

Another consideration for your evaluation should be whether the agricultural mechanics program is presenting a positive image. Too many times the agricultural mechanics program at the local high school or vocational school can be easily identified by its appearance. It will have an appearance of a poorly organized salvage yard comprised mostly of rusting scrap iron and various disassembled pieces of mystery farm machinery.

In your evaluation, consider both internal and external laboratory appearance as important factors. Too many programs suffer from poor housekeeping practices. There are no good reasons, only questionable excuses as to why some agricultural mechanics laboratories are in such cluttered, junky disarray. A positive image is critical to the eventual success of the program. If your facilities are a mess, get with it and bring order to the facility. You will be glad you did and will appreciate the positive reactions you will receive.

Safety Instruction

Another evaluation consideration should be the extent of safety instruction: (1) Are your students safe workers, do they display positive safety attitudes, and are they knowledgeable about safety practices? Evaluate your safety instruction based upon student performance, not only in the laboratory, but also at home or the work place. If students are operating equipment in an unsafe manner on the home farm, then your instructional program is lacking. The best measure of safety instruction effectiveness is what the student practices.

SOEP

As you are probably aware, supervised occupational experience programs have been a cornerstone of vocational agriculture. The next criteria for your evaluation should be whether your students are incorporating agricultural mechanics into their experience programs. Farmers and

ranchers spend many hours maintaining and repairing farm machinery, trucks, and tractors; yet, too many agriculture teachers place emphasis only on simple project construction. The successful teacher of the future is one who incorporates preventive maintenance, proper operation, and proper repair techniques and procedures into supervised occupational experience programs. Be creative and put agricultural mechanics into supervised occupational experience programs where it belongs.

Conducting the Instructional Program

Probably the most important evaluation consideration should be your approach toward teaching agricultural mechanics. Are you indeed teaching or merely conducting an open laboratory where you and your students are not quite sure what is going to happen next? Too many agriculture teachers leave the classroom to "let's go in the shop today". The students are provided with a minimum of directions and little instruction.

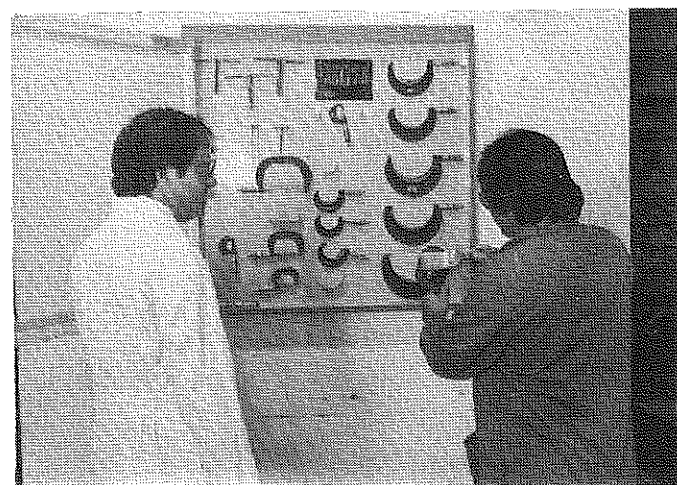
In your evaluation, consider the extent to which laboratory instruction is carefully planned: (1) Are there work stations, (2) Do you provide demonstrations, (3) Are students evaluated fairly and accurately based upon performance, and (4) Do your students enter the laboratory with a definite task or series of tasks to be completed? If you can honestly reply positively to these questions, you are probably conducting an agricultural mechanics program rather than a shop class.

Teacher Expertise

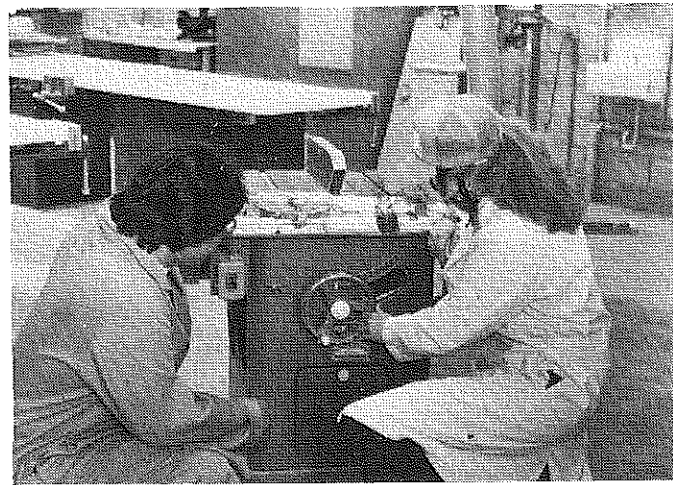
A final evaluation consideration is regarding your own expertise in agricultural mechanics. Do you regularly attend inservice workshops and classes? All fields of agriculture technology are expanding at a rapid rate and agricultural mechanics is no exception. At the time you started teaching you probably possessed only the minimal skill and expertise necessary to teach agricultural mechanics.

Unfortunately, not enough teachers continue to develop their skills and expertise by attending company and/or university sponsored workshops and classes in agricultural

(Continued on Page 22)



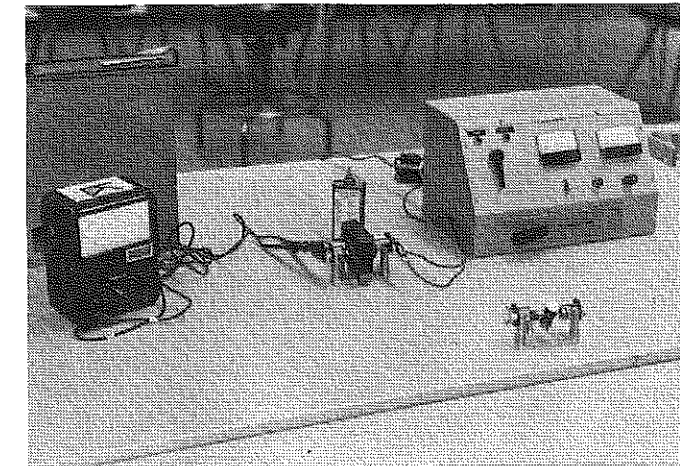
Organizing and color coding tools and equipment.



Demonstrating proper equipment operation and adjustment.



Helping students with new skills and providing assistance.



Using appropriate teaching aids. In this case, the principles of how an electric motor operates.

Evaluating Agricultural Mechanics Programs

(Continued from Page 21)

mechanics. Have you attended any such workshops or classes in the past year, or past five years? Or, do you already know all you need to know about agricultural mechanics?

Take a close look at your students' needs and plan your inservice accordingly. Take an interest in agricultural mechanics because if you do not, then do not expect your students to take an interest in your instruction.

Summary

Whether you teach agricultural mechanics a few weeks or the full school year, you can improve your instructional

program by exploring these considerations and asking yourself some basic questions. Your program will only be as strong as the means by which you evaluate it. The key to the evaluation process is your objectivity and willingness. As indicated earlier, there are reference materials available to assist you. Also, there are people in your state whose specialization is agricultural mechanics education and would be ready and able to assist you in carrying out a complete program evaluation. Your present program will only improve and progress if you, the teacher, take the initiative to conduct a complete program evaluation on a regular basis.

Reference

Bear, W. Forrest and Hoener, Thomas A. *PLANNING, ORGANIZING, AND TEACHING AGRICULTURAL MECHANICS*. St. Paul, Minn.: Hobar Publications, 1980.

THEME

Re-evaluate Your Program

There are over two hundred challenging and rewarding careers in agriculture. Farming is just one of these careers, and one that fewer students are returning to. The question we ask ourselves as instructors is: are we still training students for the same basic farm skills we trained them for thirty years ago.

If we are one of these instructors, it may be time to re-evaluate our program to fit today's agricultural needs, and the needs of all students in our classes. If we are still trying to justify our program by training farmers only, we are far behind times and, definitely need to re-evaluate and build a stronger program.

Agriculture is a highly technical and scientific field which requires a lot of people with proper technical training to keep it growing. We, as instructors, need to at least expose our students to this highly technical field, and let them know that agriculture can be as glamorous and exciting as any other career.

Many principals, superintendents and counselors are advising students that if they want to go on to college to not enroll in Vo Ag classes. We need to convince these administrators that our program has lots to offer to the college bound student, as well as the student who will never go on to college.

The SOEP is still one of our best teaching tools. The SOEP provides the first chance some students get to purchase, feed, care for and market a product. Students are required to keep records on this project, and for many students this is a first experience. Recordkeeping is not fun to teach or learn, but there are many teaching aids to help. Probably, one of the best is the computer. Computers cut out a lot of the basic math that makes recordkeeping so boring, which makes students not want to learn recordkeeping.

Career Areas

The animal science part of the program may be one of



By SANDRA HUNTER

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the areas that needs to be examined. There are many highly technical careers involved in the animal science field. Students need to know that animal science is not just learning the breeds of cattle, sheep and swine.

Plant and soil science has much scientific research and highly technical biological experiments going on, such as ways to make the now plentiful, fertile top soil last for hundreds of year, and ways to produce more grain on less acres. Today's students need to be trained to succeed and preserve what we have, the good top soils, soil condition and climate.

Agricultural mechanics is where many students get a chance to do something they really enjoy. Lots of students have a natural ability when it comes to mechanics. Just like an artist with a canvas, so are some students with mechanics skills. Agricultural mechanics has come a long way since the four row planter, but too often we are still teaching the same fundamentals. There are now millions of dollars involved in farm equipment and it is very technical. There are computers involved within the equipment itself as well as in the trouble-shooting of the equipment. The same is true with welding skills; no longer can be just get by with the basic AC/DC welders. With all the different types of metals involved in the agriculture and industrial fields, we need highly technical welders and people to operate these welders.

Agricultural management is probably one of the strongest assets of the program. This is where any student can learn things that will benefit them regardless of what career choice they make. This is where the student has a chance to learn about the stock market, commodities and different ways to market products. This is also where students get a chance to learn about income tax, social security and different type of loans. With the use of these government forms and computers, students find this challenging and exciting. Some students have already had to deal with some of these forms and programs, and those who have not know that someday they will have to deal with many of these government agencies and forms regardless of what career they choose.

Opportunities for All

The Future Farmers of America is strong, but again only a small percentage of these students will pursue a career in agriculture. Over the years, there have been several FFA members that have gone into local, state and national government offices, and most will tell you they got their first experience with leadership in high school FFA chapters. Parliamentary procedure is something from which students can benefit, and there is no academic class in which they will receive this type of training.

BOOK REVIEW

RURAL EDUCATION: IN PURSUIT OF EXCELLENCE, Frank Darnell and Patricia M. Simpson, eds. Nedlands, West Australia University, Western Australia University Press, 1981, 244 pp., \$29.95.

RURAL EDUCATION: IN PURSUIT OF EXCELLENCE, edited by Frank Darnell and Patricia M. Simpson, is a collection of selected papers from the National Conference 'New Directions in Rural Education', organized by the Education Department of Western Australia, the Organization of Economic Cooperation and Development, and The Centre for Educational Research and Innovation.

Primarily published as a result of the 1979 conference proceedings, the papers are organized into four broad topics: The Rural Situation in General; The Community Situation; The Financial Situation; and the In-School Situation. Each topic is organized to guide the reader from the most general in nature to the most specific. Only three of the twenty papers include a bibliography.

Factors in rural education such as vastness, remoteness, low population density, cultural diversity, extraor-

dinary costs, inadequate political influence, and uncertain educational goals are topics covered in the book. It is interesting to note that those concerns are often the most vexing kind for practitioners and consumers alike, regardless of the specific area of the world in which these factors are found. The book adequately covers each of these problems as well as several others, some specific to Australia, some not. At times the reader could aptly believe the problems of concern in the book are uniquely American. However, it is evident that this is simply not the case. This in itself provides a valuable lesson to those interested in rural education and makes the book worth reading.

Of particular interest is a paper by Ken N. Birks, titled "Financing of Rural Education: A State Viewpoint." Birks, as an administrator, describes the agricultural high schools as residential. The schools are staffed by agricultural and general subjects teachers as well as manual arts instructors. Each of the residential agricultural schools is described as having extensive and well developed school farms in addition to teaching and

For years many of us have limited the student body that we teach. This is often the fault of administrators and counselors that are telling the female students that there is nothing for them in the vocational agriculture classes, or going as far as saying girls are not allowed in the classes. Of course, we know this is not true, there is a lot the program has to offer the female student. We need to recruit these females into our programs. It is time we start trying to educate 100 percent of the student body instead of 50 percent. It will strengthen the program.

Many of these things are being implemented in most programs across the country. So, perhaps what we need to do now is show our local administrators, school boards, people in our communities and right on up to our state legislators, that our program is more than just training farmers. We need to let these people know that on top of everything else we teach, we are also teaching basic survival skills. These skills range from being able to repair the home lawn mower, changing a faucet, putting in a light switch, to changing the oil and filter in an automobile.

If you would look at the strong programs across the country, you would see that they have re-evaluated their programs, and doing many of the things talked about in this article. Have you taken a good look at your program lately to see if it needs to be re-evaluated?

library facilities. The curriculum is described as terminal, preparing students for direct entry into the agricultural industry. Of particular note is the fact that the students devote approximately 50 percent of their time on agricultural theory, 25 percent on relevant manual arts, and 25 percent on practical farm work.

Birks details the financing of the agricultural schools by comparing the net average cost per agricultural pupil per year at +1,942 with that of educating pupils in all other government schools in 1978/79, which incidentally was \$1,027 per pupil per year.

Albeit, the softcover edition of the book is \$29.95, I would recommend it to agricultural teachers, administrators, teacher educators, and teacher trainees. Perhaps the book should be included on the reading list of anyone who is truly interested in learning about the idioms and characteristics of rural education in another country; it might initiate a positive residual effect on rural education at home.

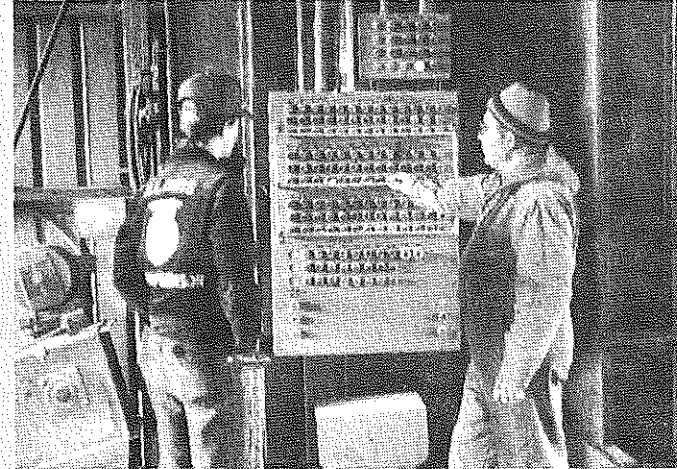
Jeffrey A. Wood
Cornell University
Ithaca, New York

Stories in Pictures

Alumni Aid Evaluation



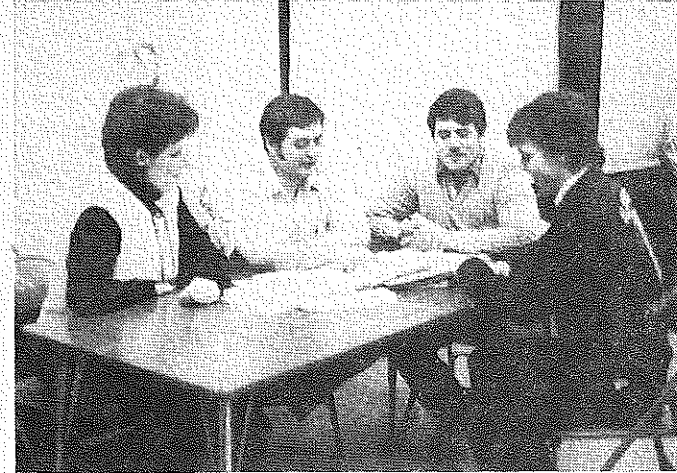
FFA Alumni member volunteers to assist students with computer in agriculture department. (Picture courtesy of Roanoke-Benson, Illinois, FFA Alumni Affiliate)



FFA Alumni member explains the high-tech agricultural job opportunities, as pictured at local elevator, to vocational agriculture student. Alumni also assist with placement and development of SOE training plans in many different agricultural occupations. (Picture courtesy of Roanoke-Benson, Illinois FFA Alumni Affiliate)



FFA Alumni helped arrange to have Congressional staff view vocational education programs. Pictured above are two U.S. Senate staff members visiting the Walkersville, Maryland, vocational agriculture program. (Picture courtesy of National FFA Alumni Association.)



FFA Alumni members interview a FFA member in selecting Proficiency Award winner. (Picture courtesy of Roanoke-Benson, Illinois, FFA Alumni Affiliate)