# Types of Evaluation

<table>
<thead>
<tr>
<th>Ends</th>
<th>Means</th>
<th>Intended</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Determine Objectives</td>
<td>To design procedures</td>
<td>CONTEXT EVALUATION</td>
<td>INPUT EVALUATION</td>
</tr>
<tr>
<td>To react to attainments</td>
<td>To use, control &amp; refine procedures</td>
<td>PRODUCT EVALUATION</td>
<td>PROCESS EVALUATION</td>
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## THEME: Evaluation of Vocational Agriculture

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Documenting Performance

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 evaluations 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 a flexible, record-keeping system will find the evaluation process to be 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 serious,

Thinking about Evaluation

EVALUATION IS A PROCESS OF FOCUSING ON A PURPOSE AND ASSESSING THE EFFECTIVENESS OF A PROGRAM. EVALUATION IS NOT A PROCESS OF CREATING A BASELINE FOR COMPARISON.
Thinking about Evaluation
(Continued from Page 3)

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

Product evaluation involves an assessment of ac-
complishments. "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 competency 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 evaluation and 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 profes-
sional journal and there is a high probability that it con-
tains an article lamenting the condition of education in the United States. Much of this public attention can be at-
tributed to A Nation at Risk (National Commission on Excellence in Education 1983) and the 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 ex-
cellence must become a visible goal for all of us involved in education.

Although there has been considerable attention to the broad problem of education, these national studies have made few references to vocational education — only two have addressed it specifically. These studies are the important Teacher'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 mid-1970s, educational evaluation has often been promoted as providing information for improving programs. In vocational education, the federal legislation has had several evaluation activities conducted regarding the effectiveness of programs. Most states have been responsive to the evaluation requirements of the fed-
eral vocational education legislation. Indeed, the Voc-
tional Education Study: The Final Report (National Institute of Education 1981) concluded that the evaluation requirements of the federal law have led to the formally stimulated evaluation activities on the part of states and localities. In carrying out their evaluation mandates, states typically have initiated reviews of their vocational educa-
tion programs once every five years. This program review has generally included information on program operations and management, programs, students, staff, and commu-
nity (Beekle 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 occupa-
tions, which will reflect the hiring needs of employ-
ers; and
- the basic employment competencies to be used in per-
formance 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 education teachers should consider many of these find-
ings 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 think about what the program strategies and materials are. Purkey and Smith (1982) identified 13 separate characteristics of effective schools that encourage aca-
demic achievement. Hetherington characterized the

- School site management
- Leadership
- Staff stability
- Curriculum articulation and organization
- Staff development
- Parental involvement and support
- Schoolwide development of an academic success
- Maximized learning time
- District support
- Collaborative planning and collegial relationship
- Sense of community
- Commodity shared, clear goals and high expectations
- Order and discipline

Using These Characteristics
There is undoubtedly a need to improve the empirical and theoretical basis for further understanding the character-
istics 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 pur-
pose 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 locus 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 initiative. 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 the degree to which decision making is given to 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, and maintaining, and reward-
ing such efforts. Therefore, evaluation activities should in-
volvetheschoolprincipalandhisorthereview.

Staff Stability
Staff stability is another key dimension that should be

examinedin evaluation efforts. Have teachers and ad-
ministrators developed long-term planning for program implementation? Has continuity been maintained? Have teachers been stable that no new ideas have been tried? Somewhere in between appears to be the most rational position. However, evaluation activities seldom examine the stabil-
ity of staff.

Curriculum Articulation and Organization
Curriculum articulation and organization are important dimensions seldom addressed in evaluation. As it con-
tinues today, how do the various curricula (e.g., agri-
culture, mathematics, science, and English) work together? Not only is scope and sequence of content and con-
ideration, 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? Staff development a continuous activity along the program improvement dimension, or is it sporadic and lacking any apparent cohe-
sion?

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 type of support is generated by parents? How often does the agriculture teacher ask to meet with parents? To what extent does the vocational ag-
culture 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, the National Ag Project). 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 ad-
ress 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, how much time, on an annual basis, is spent on English, mathematics, and science? What percentage of the time the remaining time is wasted. Few evalua-
tions have considered or examined learning time of stu-
dents. Detailed procedures for determining learning time have been developed by Halase and Desy (1984).

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

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Considerations for Improving Local Program Evaluation

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 "fief" and 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 cooperate.

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, 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 give a line of help 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 sources earlier. 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 for a time to see if they are involved in evaluating your vocational agriculture program.

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Self-Rate Your Program

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 the overall program and goals. When this happens, the big pieces of the puzzle that bring vocational agriculture programs together are easily overlooked or neglected. Better management 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 for 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 states 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.

Ratings for 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 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 suggested. Once teachers 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 help 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. maintain a montal 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 improvement might be identified:

1. provide opportunities for more guided practice
2. establish a systematic approach to the evaluation of student performance

Table 1

<table>
<thead>
<tr>
<th>Vq Program Evaluation Form</th>
<th>Rating</th>
<th>Description</th>
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<tbody>
<tr>
<td>Effective as a classroom teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective as a laboratory teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruct to which students are taught principles and practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process for which technical skill practice is provided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of students</td>
<td></td>
<td></td>
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<tr>
<td>Recruitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of instruction in day classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up-to-date courses of study</td>
<td></td>
<td></td>
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<tr>
<td>Connection between SOE and class/laboratory instruction</td>
<td></td>
<td></td>
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<tr>
<td>Supervision of SOE programs</td>
<td></td>
<td></td>
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<tr>
<td>Quality of student SOE programs</td>
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<td></td>
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<tr>
<td>Student participation in SOE</td>
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<td></td>
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<tr>
<td>Quality of IOPA program</td>
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<tr>
<td>Scope of adult programs</td>
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<tr>
<td>Personal level of professional knowledge and skill</td>
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<td></td>
</tr>
<tr>
<td>Personal level of professional knowledge and skill</td>
<td></td>
<td></td>
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<tr>
<td>Participation in professional organizations</td>
<td></td>
<td></td>
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<tr>
<td>Order and attractiveness of classroom</td>
<td></td>
<td></td>
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<tr>
<td>Use of filing system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequacy of instructional materials and references</td>
<td></td>
<td></td>
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<tr>
<td>Order and maintenance of laboratory</td>
<td></td>
<td></td>
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<tr>
<td>Amount/condition of tools and equipment</td>
<td></td>
<td></td>
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<tr>
<td>Availability/use of land laboratory</td>
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<tr>
<td>Professional relationship with school administration</td>
<td></td>
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<tr>
<td>Professional relationship with other teachers</td>
<td></td>
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<tr>
<td>Professional relationship with students</td>
<td></td>
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<tr>
<td>Professional relationship with community</td>
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<tr>
<td>The use of advisory organization</td>
<td></td>
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<tr>
<td>Leadership ensured within community</td>
<td></td>
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<tr>
<td>Personal attitudes toward teaching</td>
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(August, 1985)
Self-Rate Your Program  
(Continued from Page 7)

Once strategies have been identified, the teacher should 
review the list of elements in need of improvement and 
select the three that will receive immediate emphasis. Once 
the corresponding strategies for these elements have been ac-
complished, a second list of priority items can be iden-
tified, and so on. This technique will reduce anxiety and 
allow teachers to gradually chip away at the weaknesses in 
their program so that excellence may be achieved and main-
tained.

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 
emphasized evaluation and accountability, I in-
creased my awareness by attending several workshops on 
program evaluation. The first thing that I noticed was 
the emphasis on the impact of programs on student 
outcomes. I clearly recall the emphasis on program 
impact. My previous experience had been in obtaining re-
actions 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 
iimplementing the process of pro-
gevalua

... tion. No one was telling me "how to do it." 

I began to read, learn and eventually put my informa-
tion into a step-by-step process. This step-by-step ap-
proach 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 pursu-
ing program evaluation is thinking through the evalua-
tion 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 beneficial. However, 
we cannot conduct informal evaluations on their own 
programs that can also yield worthy results. The evalua-
tion scheme suggested in this article could be completed 
in the spring or summer of each year, with efforts to imple-
ment improvement strategies occurring throughout the 
year. Identifying priority areas for the elements of the 
system, managing and utilizing evaluation results. The abili-
ty to self-evaluate, vocational agriculture programs must 
be developed and exercised by the teachers so that excellence 
may be achieved and maintained.

By Barb Proux  
(Editor’s Note: Ms. Proux is a Program Leader in 
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on Program, South Dakota State University, 
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1. Call “Think It. Then Do It.”  

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 audi-


ece.

dents.  

Step Two. Patton emphasizes involving stakeholders in the planning of program evaluation. He prefers forming a small task force for 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 evalua-
tion 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, either advisors or de-

velopment agents.

Step Four. List and examine program objectives. Be sure 

that objectives focus on intended program accomplish-
mnts, focus on the target audience. Focus on the extent 

the audience to know or do, are measurable, and in-

clude any criteria or pro-standard. Rewrite objectives

as necessary. Identify which objectives you want to evalu-

ate.

Step Five. It is helpful to think about other reasons why 
you want to evaluate the program (beyond measuring ob-
jectives). Some people are interested in issues related to program improvement, program impact, program cost, 

future decisions about the program, potential future pro-
grams, and accountability concerns. Make a list of your reasons.

Step Six. Use Bennett’s 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 

specification. Steble added the lower step, focusing on needs assessment, which is helpful in context and input evaluations.

Step Seven. List the people or groups to whom you want 

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 type 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 ques-
tion the criteria (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 collec-
tion less difficult.

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 

2-8 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 

available (staff, money, time, data, materials, processing, for example). Then, weigh the potential benefits against 

the potential costs and decide if you should proceed, adjust or 

skip. Steble (1979) suggests that if it is never going to be 

project if it is really 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: What 

are the results from these methods; how meaningful and 

believable? Will the results be useful? Go back, review, 

and revise your plans if you answer no to either question.

Step Thirteen: Construct or obtain any needed instru-

ments.

Step Fourteen: Summarize and study the results of 

collection. Plan before the evaluation is conducted, how 

you will tally, summarize and interpret the results.

Step Fifteen: Plan ahead of what the written report will 

include. Determine if you will want to use photographs.

Step Sixteen. Also plan ahead 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 of the report. 

The latter two decisions are directly related to the particu-

lar audience to whom you are reporting.

Step Seventeen. Recognize and thank those who have 

assisted in the evaluation project.

Step Eighteen. Evaluate your program evaluation ex-

perience, making notations as to what worked and what 

you would do differently when pursuing a future evalu-

ation 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 reverse it. Nevertheless, the process described 

through the nineteen steps does result in a logical and 

complete planning process.

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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 only 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.

Revalization

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 ensure that 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.

Prior to the officer election, prepare a written statement of advisory committee purposes and answer questions concerning member roles. Provide time for introductions, discussion of mission, and establishment of avenues for establishing 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. The committee 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, schedule personnel for the next meeting. The proposed items of business should be finalized by the instructor and committee chairperson.

If needed, 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 chairperson 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 purpose.

The letter should request approval for its services concerning development, operation, and evaluation of the vocational agriculture program. Indicate that the 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 employability and transition toward further education, 6) serve as a sounding board for opinions 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 anually to provide continuous recognition of purpose and working relationship with the school.

STEP 3: The final step is 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 prohibiting discrimination practices, and encourage appropriate representation of male, female, and target group populations, 3) consist of at least 15 members within the school district, 4) secure new members 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, 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, PTA 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.

By Allan Nelson
(Tribune Note: Mr. Nelson is the Vocational Agriculture Instructor at Jesup Community School, Jesup, Iowa 50648.)

THE AGRICULTURAL EDUCATION MAGAZINE

AUGUST, 1980
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.

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.

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 advisory 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 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 bored out, and we have an influx of new (Continued on Page 14)
Using An Advisory Committee in Evaluation

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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 takes 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?"

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 (3) curriculum and instruction, (4) 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 committee 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 forward 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 in review and discusses the findings with the local agriculture service representative and the area chairperson for agriculture. After the state supervisor has completed the on-site visit, 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 YEA, and placement of graduates.

In Ohio, 20 percent of the vocational programs are involved in an in-depth review annually. This program review is intended to comply with (1) the "Minimum Standards for Ohio Elementary and Secondary Schools," Sec. 3303.07 ORC, and (2) Procedures for Evaluation, Sec. 3303.35-35-07 ORC; the "Ohio State Plan for Vocational Education" (967), Section 9.17; and the Carl D. Perkins Vocational Education Act 1984, 20 U.S.C. 3133(b)(9).

Pride in Ohio

PRIDE is an acronym for Program Review for the Im-

PRIDE SYSTEM

STATE

| COLLECTION OF EVALUATIVE INFORMATION PROCESS, PRODUCT DATA | ORGANIZATION OF INFORMATION BY LOCAL PROGRAM
| EDUCATIONAL OBJECTIVE SET VARIABLES | DATA ANALYSIS -- STATE/LOCAL DISTRICT PROGRAM GOALS AND OBJECTIVES
| EVALUATION REPORT | DATA ANALYSIS -- STATE PROGRAM GOALS AND OBJECTIVES
| EVALUATION REPORT | DATA ANALYSIS -- STATE PROGRAM GOALS AND OBJECTIVES

By James Cummins and George Sterling

(Editors' Note: Dr. Cummins is Assistant Director for Vocational Education, Agricultural Education Section, and Mr. Sterling is Supervisor in Research, Survey, and Evaluation in the Division of Vocational Education, Ohio Department of Education, Columbus, Ohio 43212.)

The agricultural and other vocational services review includes the instructional program objectives and the process variables of (3) curriculum and instruction, (4) 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.

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Pride in Ohio

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THE AGRICULTURAL EDUCATION MAGAZINE

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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, a major shortcoming of 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 expertise; (3) 35 percent of students; (2) 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 ongoing and leads to constant upgrading and improvement. This improvement will bring about better skill development, teachers, and programs.

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 continuous 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 of the Association and the maintenance of effective working relationships with other educational organizations and the lay community." (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 conducted by the program instructor. This pre-evaluation covers many aspects of the vocational agriculture including organization, physical facilities, instructional staff, materials, methods of evaluation, outcomes, and general characteristics of the program.

The second step is a formal four-day visit by 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 a photograph of the activity 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 immediately, 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 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-standards with no regard for community needs, i.e. building sizes, 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-sent 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 facility 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.
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 student's handicap. To evaluate vocational agricultural programs having an enrollment of handicapped students, the following criteria must be considered: the program goals, 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 goals. Finally, the program goals 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.

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.

Room/structures 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 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 importance 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 times.

Performance Objectives
The performance objectives should be related to the students' individualized educational programs (IEPs). 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 product 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 competences 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 who are present level of performance and motivation must be taken into consideration by the teacher when planning instruction.

Structure and Development of Meat Animals

By Oscar Potter and Chris Egan


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 meat cutting and identification of muscles for commercial processing. 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 carcasses with very detailed explanations. Through the use of these materials a student could learn the principles of meat cutting and identification of animal science. It would make a good reference for the vocational agriculture classroom.

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August 1985
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 instructional 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 cannot 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 it with 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 shop 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 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 agricultural 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 mechanics.

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Evaluating Agricultural Mechanics Programs

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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 instruction 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


Agricultural management is probably one of the strongest assets of the program. This is where any student can learn things that will make a real difference in what career they choose. This is where the student has a chance to learn about the stock market, commodities and different types of loans. This is where students have a chance to learn about income tax, social security and different types of loans. With the use of these government forms and computers, students find this challenging and exciting. Some students have already dealt 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 who have gone into local, state and national government offices, and most will tell you they got their first conference attendance by getting their FFA grades high in their 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.

For many years of us have limited the student body that we teach. This is often the fault of administrators and counselors who are unfamiliar with the facts and believe 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 of programs that has to offer the female student. We need to recruit these females into our programs. It is time we start trying to establish and increase their numbers 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 to inform 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?

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 technology within these 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 running. We do not have enough technicians 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 field.

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 a lot 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. Record-keeping is not fun to teach or learn, but there are many teaching aids to help. Providing our students with the best is the key.

Computers cut out a lot of the basic math that makes record-keeping so boring, which makes students not want to learn record-keeping.

Career Areas

The animal science part of the program may be one of the areas that need 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 better research and highly technical biological experiments going on, such as ways to make the wheat plentiful, fertile top soil last for hundreds of years, 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 the paintbrush, or some students with mechanics skills. Agricultural mechanics has come a long way since the four row planters, 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 components of the best is the computer. Computers cut out a lot of the basic math that makes record-keeping so boring, which makes students not want to learn record-keeping.

BOOK REVIEW

RURAL EDUCATION: IN PURSUIT OF EXCELLENCE, Frank Darnell and Patricia M. Simpson, 244 pp., $25.00, April 1985, Western Australian University, Western Australia University Press, 1981, 244 pp., $25.00.

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 Organisation of Economic Co-operation and Development, and the Centre for Educational Research and Innovation.

Primarily published as a result of the 1979 conference, 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 high percentage of the topics.

Factors in rural education such as vastness, remoteness, low population density, cultural diversity, extraordinaryריديني costs, inadequate political influence, and uncertain educational provision. It is interesting to note that these concerns are often the most vexing for practitioners and concerned 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 apply 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, coeducational and separate by agricultural and general subjects teachers as well as manual arts instructors. Each of the thirty agricultural high schools is described as having extensive and well developed school farms in addition to teaching and library facilities. The curriculum is described as terminal, preparing students for entry into the agricultural industry. Of particular note is the fact that the students devote approximately 50 percent of their time to study on agricultural theory, 25 percent on relevant manual arts, and 25 percent on practical farm experience.

Birks details the financing of the agricultural schools by comparing the net average cost per agricultural pupil per year at $3,942 with that of educating pupils in all other government schools in 1978-79, which incurred an average of $1,942 per pupil per year.

Altobeli, the softcover edition of the book is $29.95, I would recommend it to agricultural teachers, administra tors, and as a tool for teacher-trainers. Perhaps the book should be included on the reading list of anyone who is truly interested in learning about the interdependence and characteristics of rural education in another country; it might initiate a positive residual effect on rural education at home.

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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)