SHOP PROJECT PLANS—Posting a third copy of each student's plans helps Alvinworth, Nebraska Vo-Ag students build better projects. Roger Orsola requires each student to prepare three copies of each plan—one for the student's notebook, one for the instructor's file, and one to be posted on a blurred display board in the shop. Any design changes agreed upon are recorded on the posted copy. Roger also uses "blue glue" to increase the life of projects that are used outside. (Photo by Richard Douglass)

SUMMER'S THE TIME TO LEARN NEW SKILLS—Arkansas Vo-Ag instructors involved in-service training last summer at Camp Coolidge. The head of the engineering department at the University of Arkansas, Professor Bill Bryan, provided the instruction in the use of the transit. This type of in-service instruction results when groups of teachers identify common needs and request specific programs. (Photo by Mariano D. Fitcher, Assistant Supervisor, 4-H’z, Arkansas)

Stories in Pictures
by Richard Douglass

POWER PUFF SHOP—Harold Johns, Vo-Ag Instructor at Blount, Nebraska, teams classes for a short course in the Home Economics Instructor. He has requested for a number of years for a suitable way to develop the shop skills needed by the modern homemaker. Harold uses a cedar chest assembly kit as a teaching tool. The kit develops basic hand tool and finishing skills while producing an attractive and useful product. The students are enthusiastic about the project, which can be completed quickly. (Photo by Richard Douglass)

Ideas Unlimited Contest—The NVATA sponsors an Ideas Unlimited contest annually during their national convention. It is directed to give classroom teachers an opportunity to share their ideas. Arkansas National sponsored the contest for the 1972 winners. Arkansas National was sponsored by the Arkansas State Teachers Association. To create a better understanding between producers and consumers, Larry Stolz, Vevlosan Agra-Science student at Kansas, used boxes receiving the largest package, was selected National Winner. His idea was "Redbud the Farming and More" which described the tours they give kindergarten students in their school farm.

Pictured left to right are the winners of the 1972 contest: Donald Guider, Greenfield, Massachusetts; Gary Pruy, Liberals, Montana; Larry L. Shirley, Atwater, Kansas; Richard R. Klern, Rapid City, South Dakota. The winners were chosen on the basis of their idea's presentation, originality, practicality, and potential for general use. The winners will be guests at the 1973 National Convention in Dallas, Texas, and will receive cash awards and plaques for their ideas. (Photo by Richard Douglass)
and complexity of the situation has greatly increased. In addition, teachers tend to be carrying a heavy load of teaching and guidance of occupational experience programs. Thus it appears that teachers will become increasingly less able to provide a service that is urgently needed. The alternative is for schools of vocational guidance to establish placement services or provide other assistance to teachers in bringing out this important task.

To what extent are schools now providing assistance in placing their former students? Indications are that insufficient assistance is being given. In a recent follow-up survey of a group of former vocational students, there were 1,078 responses to the question "Who helped you find your first job?" Guidance counselors provided assistance for 6.1 percent of the respondents and the placement services at school provided assistance for 3.2 percent. Assistance was provided for 22.8 percent of the students by vocational teachers and 1.0 percent by other teacher. The largest group of students, 45.8 percent, answered the question by indicating "found it myself." Other students reported they were helped by the state employment service, relatives and others. All schools accept a major responsibility for placement, one would expect the above percentages indicating school involvement to be much higher.

The follow-up of former students has generally been conducted by vocational teachers. The information collected is basic, depending on the requirements for reporting to the U.S. Office of Education. To meet these requirements, the largest group of students, 45.8 percent of the respondents, answered the question "Who helped you find your first job?" by indicating "found it myself." teachers must determine for a given date if the former students are employed in the field trained or related field, have other employment or are unemployed. Former students who are continuing their education at a higher level or for some other reason are not available for placement must also be reported. While these data are important they are not sufficient for use in evaluation and program improvement. Other information is needed, both on the students' first job and on the student's second job (the two are different). The following are suggested questions which may be asked concerning the first job:

- Was your first job in the occupational area of your major vocational program?
- If your first job was in the field for which you were trained in school, why was it not in that field?
- If it took longer than you expected to find your first job, what was the most important reason?
- Did you find your first job?
- How many hours per week were you required to work on the first job?
- What was the title of your first job?
- How well did your vocational training prepare you for your first job?
- How far from your high school was your first job located?
- What was the starting pay (before deductions) on your first job?
- In many instances, students will have changed jobs before the follow-up is conducted. The following are suggested questions which may be asked concerning the present job:

- What is the title of your present job?
- How many hours per week are you required to work on your present job?
- How do you like your present job?
- Did you get your present job because of your vocational training?
- In your present job how often do you use the knowledge and skills acquired from your vocational training?
- What is the pay (before deductions) on your present job?

Three questions should, of course, have multiple-choice answers for the students to check.

A follow-up question on the school's responsibility for placing and following up students. This is especially true if the school subscribes to the career education concept and is implementing a career education program. The career education concept is enthusiastically supported by most agricultural occupations instructors in Illinois. The Illinois Model for Career Education is used by local directors of vocational education to design and implement vocational and technical education programs for their respective schools. Each local plan reflects an educational program that is occupationally oriented. The program is designed to prepare students for job entry or further education leading to job entry.

Career Education, The Illinois Model

A career education model (Figure 1) has been developed

Figure 1

Career Education, the Illinois Model

Robert W. Walker
Division of Agricultural Education
University of Illinois, Urbana

Placement and follow-up are recognized components of guidance responsibilities of the instructor to instill.

Guidance, an Integral Part of the Curriculum

Agricultural occupations instructors accept without question responsibility for preparing and implementing the curriculum for agricultural occupations students but many do not consider guidance as an integral part of the curriculum. Whereas the curriculum deals with the subject matter content of a program, guidance is to be most effective focuses on students and deals primarily with their needs. Integrating guidance into the curriculum helps to make it student centered.

The instructor has the responsibility to initiate many activities that can be classified as counselor guidance. One of these activities is providing help during the career education process. The components of guidance are placement and another component is follow-up. These two components can be brought into perspective by examining ten suggested components for a well-implemented guidance program. The components are as follows:

1. Informing prospective students, their parents, instructional staff and community
2. Identifying students for enrollment in educational programs
3. Collecting, recording, and summarizing personal data on students
4. Informing and orienting students about educational and occupational opportunities
5. Assisting students to develop educational and career plans
6. Advising and counseling to students
7. Cooperating with other instructional and ancillary staff and utilizing community resources
8. Planning experiences for campus (CWP) and in entry level jobs
9. Following and evaluating students' progress within the program and beyond
10. Revising existing and planning new curricula offering to meet the needs of students

The value of the foregoing components of guidance can be determined by assuming the role of a teacher who has recently accepted a teaching position. With each component the teacher identifies activities which he may engage to accomplish the task that is implied in each.

(Concluded on next page)
The Agricultural Occupations Instructor's program should be
conducted within the guidance department of each local school.

2. The state Division of Vocational and Technical Education should work with the universities of the state, as well as the local agencies, to develop, implement, and fund a regional placement service utilizing federal funds.

3. Emphasis should be placed by the universities upon training specialists in placement and follow-up.

The Agricultural Occupations Instructor's program should be conducted within the guidance department of each local school. The state Division of Vocational and Technical Education should work with the universities of the state, as well as the local agencies, to develop, implement, and fund a regional placement service utilizing federal funds.

The formal follow-up of students is limited in many schools to recent graduates and is often accomplished within one year after graduation. Few schools are implementing formal follow-up studies that go beyond the first follow-up, which is a routine administrative personnel in small schools that is an informal follow-up of students over a period of time that is in a different field but such a follow-up does not provide much value in evaluating the effectiveness of the curriculum. A formal follow-up of students is needed and should be coordinated by the guidance department in all school programs. The agricultural occupations instructors may initiate the program and then encourage the guidance staff to assist. Hopefully, the guidance staff will assume a coordinating role.

Follow-up of former students serves to help the school make an outcome assessment of performance and provide guidance in their chosen career. Feedback from students can assist occupational instructors and all former teachers to make revisions and adjustments to the occupational and supportive programs of the school.

A study of Norton and Waterbury (2) disclosed that the follow-up of students in an evaluation of Illinois Occupational Programs has operated under an assumption that if certain conditions judged to be important for an effective program are met, the program will be satisfactory. Actually, without effective follow-up of students there is no way of knowing whether there is any important relationship between occupational performance and satisfactory school, high school, or on-the-job effectiveness. Therefore, student performance is an important issue and the high School, high school, and on-the-job effectiveness. Therefore, it is important to know what happens to students (preferably all of them) after they leave school as deeply as possible. Follow-up should provide information for at least three years and preferably five years from the date of graduation.

In summary, placement and follow-up are important components of a career education program. The guidance counselor should coordinate activities associated with a placement service for career education students. Each occupational instructor should lead support to the program and take responsibility for following up former students. The follow-up data should be used to revise the educational program to improve the on-the-job effectiveness of future graduates.

---

The return of technically trained persons to rural communities is a positive aspect of the post-secondary programs.

Supervised On-The-Job Training, Vital

Supervised on-the-job training is a vital component of the post-secondary programs and agribusiness technical and business activities in actual working situations. Students gain experience in varied areas of agriculture and agricultural enterprises can specialize in areas of personal interest as they prepare for job entry. Frequently students find jobs in communities where they have completed one or more blocks of supervised on-the-job training.

Staff members as well as students benefit from supervised on-the-job training. Staff members each teach fifteen hours per week and participate in work-study supervision. Both staff members visit each student and employer during each week. This constant contact with agriculture industries helps instructors remain sensitive to rapid technical and business changes and new developments in agriculture.
EQUIPPED FOR INSTRUCTIONAL VISITS

Gary K. Drake
Vocational Agriculture Instructor
Genoa, Nebraska

Dr. Harold Ecker
Professor and Director
Institute of Agricultural Technology
Michigan State University

U.S. colleges are currently graduating about the same number of technicians as students in agriculture and natural resources. Last year, approximately 10,000 students completed 1-3 years of agricultural courses leading to a degree in the U.S. During the 1970-71 school year, there were about 9,000 bachelor's level technicians graduating in agriculture and natural resources awarded by all U.S. colleges.

Technical education in agriculture is a very strong position today, but we are willing to face the problem areas realistically, much of the paid work in the last decade will be.

The job market for technicians in Michigan tends to be out of the need for technicians in agriculture. This year, there were at least 400 job openings for the 200 technicians of the Institute of Agricultural Technology at Michigan State University. Technical program directors from other states indicate the same situation: more job openings than graduates.

Since 1963, the U.S. Office of Education has emphasized millions of dollars to study the need for technicians, develop curricula, and institute new technical programs in agriculture. This national effort has contributed to a major factor in the expansion of technical education. The number of 1-3 year technical programs in agriculture has increased since 1965. Student members in these programs have tripled in the same period. National statistics compiled by Mansley and Ivens show over 30,000 students in technical programs in agriculture last year as compared with about 10,000 in 1966. (Figure 1)

The emphasis on technical education is long overdue. However, rapid expansion of this field has not been without problems. It is always difficult to discuss problems without leaving the reader in the impression that negative aspects outweigh the positive. The author certainly does not want to leave these problems.

Technical education programs in agriculture must exist in response to the

(Concluded on next page)
RESPONSIBILITY IS...

Going All The Way With Placement And Follow-up

Oddy G. Miller
NYATA Region IV Vice President Vocational Education
Mount Healthy High School
Mount Healthy, Ohio

The question is often asked, "When do you place your students?" I like to think that the placement placement is the moment when students start their work with the guidance counselor to explore the "World of Work in Agriculture" to the ninth, seventh, and eighth grade.

This is accomplished by the use of films, pamphlets, and other pertinent materials which will explain the many careers in agriculture. This year, the FFA Alumni members are going to explain their jobs and the related fields in their areas.

Once the eighth grade student has signed up for vocational agriculture, he/she is visited in the home. The Voc-Ag program is further explained. This includes the various opportunities in agriculture. During the freshman year, field trips are arranged to agribusiness so that the student can see first hand what is involved in each job.

At each unit, taught, career opportunities are discussed which include the educational requirements and the related areas where specific training is available.

This year, only 28 of the 82 students were failing in the past year. All but one of these students has made significant gains. Each one of these students is working hard to meet the challenges of the future. It is evident that students have the ability to succeed.

The follow-up of the student after placement is most important, you may have to start the follow-up all over again. The supervision of the student may help him develop the proper attitude. If you do not get a good attitude, it may be impossible to change it. However, you can try to change the attitude of the student. It is possible to change the attitude of the student.

This is also the time to discuss the student's future plans - college or technical school. The student should be aware of the options available to him.

The young farmer program is especially important. My young farmers have been very successful. They are able to find employment in the field of agriculture.

Today, the vocational agriculture teacher must be willing to help place his students in the agricultural field. He is responsible for the student's success in the agricultural field and should be ready to help his students find employment in the agricultural field.
TRANSFORMING A DREAM
INTO A REALITY

The only way to make a dream come true is to wake up! And unless we wake up to the crying need for place-
ment and follow-up services, all of the "good intentions" of the career edu-
cation concept are ineffective. The recent issues of this magazine have pointed to
the exciting and fruitful potential of applying the career education concept at
every grade and ability level. And yes, the dream is a pleasant one that
will come true if we wake up to the school's responsibility for
placement and follow-up.

Studies indicate only a small minority of young people utilize the services of a placement agency in finding jobs.
They "fall" into their jobs either on recommendation of relatives and friends or by sheer happenstance. Further,
there is little evidence that a placement agency can assure job-hunting success. In fact, experts suggest that
when young people are forced into working out occupational ad-
justment problems by themselves, the result will generally be inefficient use of human resources.

In his book, Vocational Education and Guidance, James A. Brooks suggests, "that a special service of place-
ment and follow-up is a logical function of the public edu-
cation system since the graduates are its products..." This statement rings with a good deal of common sense. Certainly
a wise farmer is as concerned with the marketing of his
finished product as he is with raising it. Conversely, the
school should be concerned with placement and follow-up
of its students as it is with its curriculum. Surely the school
has a reasonable responsibility to its students which trans-
sends the school-years. It is not, however, the intent of this
article to needlessly nag educators as to their global societal responsibilities but rather to relate some very practical and
desirable reasons why placement and follow-up should re-
mian in the school's domain. There are many reasons why it
is strategically and educationally sound for schools to pro-
vide placement and follow-up services:

1) IMPROVES PUBLIC RELATIONS. The success-
ful placement of students in occupations relating to their
career choices does much to answer the public's questioning of accountability. In addition to the
student's career fulfillment, placement and follow-up go a long way towards improving parent-student-
school-employer relationships.

2) INCREASES THE MOTIVATION OF IN-
CONCERNED STUDENTS. If the present in-school students recognize that the school's commitment to them
goes beyond graduation, a closer student-engagement
relationship will result. The students will care
more about school because the school cares more about them.

3) FACILITATES STUDENT'S OCCUPATIONAL
DECISION MAKING ABILITY. Any school that
has attempted to keep abreast of manpower and
career trends in a virtual storehouse of career informa-
tion and data. When such resources are used by
competent staff the students can receive personal professional assistance in making occupational de-
cisions.

4) FACILITATES STUDENT'S TRANSITION
FROM TRAINING TO WORK. There is very
little doubt that the school has a closer working rel-
ationship with its students than does a private place-
ment agency. This relationship can greatly guide the
student into a compatible job. Remember, a private
placement agency realizes success when it receives its
commission for placing the student. The school
realizes success only when the student succeeds.

5) ADDS A NEW DIMENSION TO EVALUATION
PROCEDURES. Placement and follow-up affords
the school a unique opportunity to evaluate itself.
"The relevancy of a school's program can be put to
the test if that school actively attempts to place its
students in occupations for which they were trained.

The development and organization of an effective place-
ment and follow-up service has only begun in most schools... it if has begun at all. It is a slow process. The en-
couraging aspect is that it can be done to some degree in

any school, regardless of size. The placement technique or
series of techniques that is best will depend on each local
educational agency. The following are not by themselves
placement services. They can, however, prove to be effective
when used together with other activities.

1) S.A.E.P., VISITATIONS AND STUDENT
CONFERENCES. Supervised Agricultural Experience
Project Visitations and student conferences are in-
valuable in building the rapport necessary to crystal-
ize the student's real career aspirations. This "tech-
nique" is used widely in the teaching of agricultural
occupations and needs little adaptation to fit this purpose.

2) SURVEYS. A systematic approach to surveying the
local employment trends of your community will
prove to be most helpful in providing sound place-
ment services. Also, follow-up surveys of graduated
students will give a quick check of the program's
legitimacy. A meaningful survey can be made at very
little cost... usually proportional to the size of the
school.

3) CAREER DAY. Set aside a day or two in order to
bring members of the business and industry com-
unity to the school. A Career Day can be orga-
nized in the same manner as a College Day. The end
result of a Career Day is two-fold. First, the students
get a "first-hand" view of what their career opportuni-
ties are as well as what will be expected of them.
Second, the students will have a head start at being
"pied" by potential employers. Obviously, Career
Day can be implemented with very little funds and
only minimal effort.

4) wanted bulletin board. Maintain a
help-wanted bulletin board in a centrally located
area. Students can be assigned to keep the bulletin
board current.

5) EMPLOYER-SCHOOL HOTLINE. "Self" em-
ployers on the idea of calling the school when they
have manpower needs rather than going to some
other agency. You "know" your students and should
be able to do a better job of matching man with
job than could some other agency.

6) STUDENT RECORDS. The records of each stu-
dent should be in a convenient location and acces-
able to you if an employer calls.

7) COOPERATIVE JOB TRAINING PROGRAM.
On-the-job training experience for high school stu-
dents is perhaps the single best technique that schools
can use. Although trainers are not compelled to hire
the student past graduation, such situations often result.
Even if the student is not hired, most em-
ployers are able to supply some valuable "connec-
tions" with other businesses.

Some schools may wish to join with other schools in pro-
viding a cooperative placement and follow-up service. No
doubt there are many techniques that need to be tried. The
fact remains, without effective placement and follow-up ser-
vice we will in career education had better enjoy the dream
while it lasts.

Arlyn Mahlman (left) has been offered a full-time job at the
local feed store after an interview from her school. Mr. Howard Clark
(right) provides valuable input as to the relevancy of the school's
program.

Barb Jonse (right) and his employer Mr. Lowell Nelson (left)
recognize that a school's commitment to its students must go beyond
the school's campus.

JUNE, 1971
PLACEMENT IS A PART OF CAREER EDUCATION

James L. Becker
Director of Community Services
Muscogee - Community College
Muscogee, Iowa

James L. Becker

The placement of students who complete vocational and technical programs is an important responsibility of the secondary and postsecondary teacher of agriculture. The agriculture teacher is frequently called upon to help his students make career choices and educational plans. The lack of reliable information about job training and occupational success of students limits the assistance a teacher can provide.

The problem with which recent study was concerned was: Can teachers use placement and occupational success in agricultural mechanics be predicted from high school, college grade point average (GPA), and GPA in college agricultural mechanics courses? Cumulative college GPA and GPA in college agricultural mechanics courses served as measures of training success. Data were also collected from employers to obtain measures of occupational success of graduates. Employers were asked to rate both the quality and the quantity of work of the community college graduates. Stepwise regression, t-tests, and correlation were used to analyze the data.

Findings

Findings pertaining to the high school record were as follows:
1. The size of the high school at graduation was significantly related to the training success of pupils but had practically no relationship to training success scores of graduates.
2. The size of the high school at graduation was not a reliable predictor of the training success scores of droppers but had practically no relationship to training success scores of graduates.
3. The graduates came from significantly smaller high schools than dropouts and earned significantly higher training success scores than dropouts.
4. The rank in high school graduating class was not consistently related to training success scores of both groups, graduates and dropouts, and all variables studied.
5. The rank in high school graduating class was the single best predictor of training success scores of both groups. Graduates were consistently more closely related than dropouts but had practically no relationship to training success of graduates.
6. The number of years of high school agricultural success scores of both groups was consistently more closely related than dropouts but had practically no relationship to training success of graduates.
7. The number of years of high school agricultural success scores of both groups was consistently more closely related than dropouts but had practically no relationship to training success of graduates.
8. The number of years of high school agricultural success scores of both groups was consistently more closely related than dropouts but had practically no relationship to training success of graduates.
9. The number of years of high school agricultural success scores of both groups was consistently more closely related than dropouts but had practically no relationship to training success of graduates.
10. The number of years of high school agricultural success scores of both groups was consistently more closely related than dropouts but had practically no relationship to training success of graduates.

Conclusions

The best single predictor of training success in a community college agricultural mechanics curriculum was the variable of cumulative college GPA. This variable alone accounted for 54% of the variance in training success scores of both groups.

The study had the following conclusions when the stated:

"Vocational grade is a variable that is an important predictor of educational success. It is an important factor in determining the success of students.

..."
JOB SUCCESS—Are We On The Right Track?

Harry is a bright, energetic Michigan high school graduate in vocational agriculture. He is now in a state of frustration and despair because—having just been fired from his third job—he feels that he has no vocation at all.

This happened in spite of the fact that his mechanical skills and workmanship are considered by a mechanic in the Rogers’ Brothers Farm Equipment Company were recognized as excellent.

Harry is not alone in his hard-working, enthusiastic vocational agriculture graduate of another high school. He is the Farm Credit representative in the Tiressesville Bank and Trust Company, that is he was until a couple of hours ago when the president had a little conference with him and discharged him “for good of the organization.”

Both Harry and Richard have been highly recommended by their respective vocational agriculture teachers after having finished college in Cooperative Agricultural Educational programs.

They had participated in work experience programs gaining confidence in their skills and capabilities. Their teachers will register shock and disbelieve at their changes. They were expected to be the model students and well qualified, but were they fired?

What happened to Harry and Richard? Perhaps it would be more appropriate to ask what failed to happen? Year after year, thousands of young, technically trained men like Richard and Harry lose their jobs. Few persons are aware of the real reasons, but what are the reasons? Many students feel that the vocational education programs are not preparing them adequately.

Employers are becoming more acutely aware of the “survival force” at work in their businesses. Employee morale ranks highest of all in these forces. An atmosphere where working in the organization often makes the difference between profit and loss as competition becomes keen in agriculture businesses.

A single disgruntled, discontent worker is a potential disaster to group efficiency. Somewhere along the line, the fact was not properly impressed upon Harry or Richard.

Neither person believes that vocational agriculture, or even the secondary schools for that matter, should accept responsibility for providing social skills. Those who object to the school being concerned with the social development do not believe this phase of human growth is properly peculiar to the school as it is the school has enough to do if it is intensely intellectual and technical development.

But we believe that the teaching of work skills is the responsibility of the home, not the school does not solve the problem. In our new job, Harry is finding himself completely alienated from this responsibility. He goes to his schools through their various career educational programs at seven institutions in Ohio.

Continued substantial growth in numbers of students, graduates, and programs is indicated for the future. Eleven new programs involving 235 students were established as three new institutions during 1972. Agricultural technologies were offered for the first time at the Agricultural and Technical Institute, Wooster; the Cincinnati Technical College, Cincinnati; and the Beech Technical College, Ohio State University.

First year enrollment for all agricultural technology programs in Ohio for 1972 totalled 670 students. This figure represents a 98 per cent increase in the number of first year students over the 1971-72 first year enrollment. The total enrollment in Technical Agriculture Programs in Ohio for 1972-73 is 998 students. This is a 51 per cent increase in total enrollment over the previous year.

Table 1 presents information on the number of second year students of the 292 enrollments in 1971-72. There were 218 graduates in 1972 in these technological programs in high school. Twenty-eight per cent of the enrollees were from farm homes, and 43 per cent listed this as their home of origin. The proportion of the fathers of enrollees were employed in non-agricultural business while most of the remainder were engaged in farming.

Approximately 47 per cent of the first year students lived within 50 miles of their institution, and 36 per cent lived beyond 100 miles. Nearly all enrollees worked during high school and the summer before entering technical school. Enrollees favored outdoor, manipulative, and managerial activities when evaluating future work conditions.

Second Year Students

Students graduating in 1972 accumulated an average of 280 hours per week and 24 weeks per year. The majority were employed in agricultural jobs, jobs related to training, employment opportunities, advancement and beginning at a higher wage were rated highest as reasons for choosing technical school. Advancement, working conditions, training opportunities, and employer selection were among the most influential factors in selecting a position.

On-the-job training and student contacts were rated as the most useful to future jobs; students also rated technical school coursework in agriculture and counselling of students as average or higher in value to future work. Incidentally, vocational agriculture was considered of greater value than other courses.

Table 1 presents specific data concerning the number of graduates of the various technologies.

The study was based on the field research of the 1971-72 study included all students and dropouts in the entire agricultural technology programs in high school in Ohio, plus the 1971 spring graduates of seven programs and their employers.

First Year Students

The typical first year enrollment was 19.8 years of age and half of the students were both boys and girls. The 1971-72 study indicated that 10.9 students could complete the 20.9 program in technical agriculture in high school. Twenty-eight per cent of the enrollees were from farm homes, and 45 per cent listed this as their home of origin. The proportion of the fathers of enrollees were employed in non-agricultural business while most of the remainder were engaged in farming.

Approximately 34 per cent of the first year students lived within 50 miles of their institution, and 46 per cent lived beyond 100 miles. Nearly all enrollees worked during high school and the summer before entering technical school. Enrollees favored outdoor, manipulative, and managerial activities when evaluating future work conditions.
washing machine. Some technical skills may be observed, but where are the models of the social forces working within the town, in the plant, to be observed.

Then too perhaps another concern of research we need as C.A.E. matures is the type which would articulate the place of such programs in the establishment and maintenance of viable patterns of flowering and young students. The church no longer plays the role that it formerly did in establishing values for many of our generation — and our former students of even a decade ago. One recent survey could have solved! What are the implications for C.A.E. in helping young men and women establish moral codes of conduct?

What our C.A.E. programs become will depend upon the degree of fulfillment with the present, the originality and intuitiveness of our searchers, and the adaptability and professional vision of the thousands of teachers of vocational agriculture embarked upon this new venture. Research is desperately needed not just of the urgent, the obvious, the last tangible social and human competencies, but also of the job market. These three basic requirements must be identified — and taught.

---

**Figure 1 — Agricultural Technology in Ohio**

**Key to Figure 1**

---

**TABLE 1**

<table>
<thead>
<tr>
<th>Farming Experience During Various Summer Activities Indicated by Teachers and Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity</strong></td>
</tr>
<tr>
<td>Supervising Occupational Experience Programs</td>
</tr>
<tr>
<td>Planting and Preparing Instructional Program</td>
</tr>
<tr>
<td>Improvement Facilities and Equipment</td>
</tr>
<tr>
<td>Professional Development</td>
</tr>
<tr>
<td>Farming Experience During Various Summer Activities Indicated by Teachers and Administrators</td>
</tr>
<tr>
<td>Student Recruitment</td>
</tr>
<tr>
<td>Public Information Activities</td>
</tr>
</tbody>
</table>

---

**CONCLUSION**

Warren G. Noland

Our major concern must be the students who have been lost since the summer programs began. The students who have been lost have been those who are most likely to benefit from the programs. They are the students who are most likely to benefit from the programs. They are the students who are most likely to benefit from the programs.

---

**June, 1973**
TWO BLACK STUDENTS GET INTO COLLEGE
Eight Are Forgotten

Frank B. Killough
Vocational Agriculture Instructor
Ashland High School
Ashland, Alabama

The Vocational Teacher Must be Prepared to Fill the Vacuum Created in the Guidance Office. This vacuum consists of the lack of guidance for the non-college-bound black student.

Special considerations are made to get blacks into college. The counselor does not hesitate to assist the black counselor in making several applications to college entrance. Out of 90 students who entered the non-college-bound black student.

A two-year study has just been completed which identified student characteristics and the factors of most importance for success in the Associate Degree Program in Agriculture. The study was an analysis of all students who had graduated from 1965 to 1970 in Agriculture at the University of Nevada, Reno. A three-pronged approach was used as follows:

1. A small motor repair man in Connecticut makes $17.50 per hour.

2. A major in St. Louis earns less than $13.00 per hour.

3. Pay your counseling from your office desk to the classroom. Teach the dignity of work to all races. Peer pressure has led many students to take sick days to go to college even though

4. Howard H. Christensen
Research Specialist in Agricultural Economics
University of Nevada, Reno

A student motivation for success begins with sound vocational guidance and counseling program.

Identifiable characteristics of students making satisfactory progress:

1. Drive, enthusiasm, and desire to try on their own rather than sit and "get by."

2. Perseverance to keep trying to achieve in spite of academic limitations and low grades in some classes.

3. Drive, enthusiasm, and desire to try on their own rather than sit and "get by."

4. A concern for the quality and timeliness of assignments.

5. A wholesome attitude towards learning, such as paying attention, following directions, and attempting to understand and follow through on the problems.

6. Mentally curious enough to ask questions and participate in discussion.

7. Reasonably proficient in reading, writing, and simple mathematics, but more important than the use and progress in the development of these skills.

8. Punctual and regular class attendance.

Characteristics of poor achievers or those who were likely to fail:

1. Lack the characteristics listed above for students who have graduated or making satisfactory progress.

2. Do not have a specific occupational or educational objective comparable to the majors provided in the Associate Degree program. They are typically students who are enrolled to make up grade-points in the Bachelor's degree program or they are employed to avoid the military service.

3. They have poor scholastic habits and attitudes. They avoid reading, writing, mathematics and the usage of academic skills. Their attitudes and habits have been developed through the years because the student has learned the art of "getting by" so they can remain with their peer group. They have a fear of falling and thus are unwilling to try anything new. They are creative in tussling their educational and training experience and follow the practice of "getting by."

Summary

To conduct a successful Associate Degree program it appears the following points must be achieved:

1. It is necessary to help the student make the decision to accept the Associate Degree program.

2. It is necessary to understand the student's program and enhance the urgency of his need for determining an occupational objective.

3. It is necessary to inform and experience that is designed more to the ability of the students selected, so a higher percentage will complete the training provided and gain the competence needed to compete in the skilled, technical, and management-supervisory levels of employment.
FACTS ON TEACHER SUPPLY AND DEMAND IN EDUCATIONAL AGRICULTURE IN 1972

There were 10,716 positions in teaching vocational agriculture in the United States in 1972, an increase of 278 for the year. Of these positions, 2,106 were needed for 1,206, and state supervisors predict that 11,977 teachers will be needed by 1977. An additional 1,603 persons taught agricultural technicals in institutions and community colleges.

States adding the largest number of new teaching positions in vocational agriculture last year included Minnesota with 60, Florida with 36, Texas with 33, Ohio with 33, and California with 30.

The teacher shortage continued. Seventy-four departments of vocational agriculture in the United States could not open this year because of a shortage of qualified persons to teach them. There were 134 more teachers needed than were qualified.

The next acute shortage of teachers reported in 1972 were Florida, Virginia, Washington, North Carolina, Georgia, Ohio, Indiana, and California.

The state with the largest number of teachers of vo-ag in 1972 was Texas, followed by Wyoming with 518, Ohio with 509, California with 473, Minnesota with 445, and Alabama with 400.

About one-half of all teachers were reported to be more than two years in their positions. Approximately 1,500 teachers were needed to hold 10,716 specialized units on the agricultural education in agriculture in 20 states. Only 1,000 teachers in 49 states taught special classes in agriculture for disadvantaged students.

A complete list of these teachers is available from the American Association of Agriculture Teachers, 1600 Massachusetts Ave., N.W., Washington, D.C. 20036.

From the Book Review Desk... BOOK REVIEWS

Selling Farm and Garden Supplies, by Walt, Joy and Howard.

New York: McGraw-Hill, 1972. 234 pages. $8.50. This is a practical guide to the business of selling farm and garden supplies and to the agribusiness executive who wants to understand the farming and gardening business better. It contains valuable information on marketing, management, and merchandising.

The author, Mr. Howard, is a well-known writer in the field of agriculture and has written several books on the subject.

One of the most interesting chapters is on "Marketing Farm and Garden Supplies." It discusses various aspects of marketing such as product development, pricing, promotion, and distribution. The chapter also provides practical tips on how to increase sales and improve customer service.

Another important chapter is on "The Farmer as Customer." It emphasizes the importance of understanding and meeting the needs of the farmer. This chapter provides valuable insights into the mindset of the farmer and how to cater to his needs.

In conclusion, this book is highly recommended for anyone involved in the business of selling farm and garden supplies. It is a comprehensive guide that provides valuable insights into the marketing and management aspects of the industry. It is also an excellent resource for agribusiness executives who want to improve their understanding of the farming and gardening business.

What Vocational Education Teachers Should Know About: Instructional Evaluation, by David Bjerck. Columbus, Ohio: ERIC Clearinghouse on Vocational Education, 1972. 112 pages. $4.00. This book is a valuable resource for teachers who want to improve their instructional practices. It provides a comprehensive overview of instructional evaluation and offers practical guidance on how to conduct effective evaluations.

The first part of the book introduces the concept of instructional evaluation and explains its importance in improving teaching and learning. It also provides an overview of the various types of instructional evaluations, such as formative, summative, and diagnostic evaluations.

The second part of the book focuses on the process of conducting instructional evaluations. It discusses the steps involved in selecting, designing, and implementing instructional evaluation tools. It also provides examples of different types of evaluation tools, such as rubrics, checklists, and observation protocols.

The third part of the book offers practical guidance on how to interpret and use the results of instructional evaluations. It discusses how to analyze and interpret the data collected during the evaluation process, and how to use the results to make informed decisions about teaching and learning.

Overall, this book is an excellent resource for vocational education teachers who want to improve their instructional practices. It provides a comprehensive overview of instructional evaluation and offers practical guidance on how to conduct effective evaluations. It is highly recommended for teachers who want to enhance their instructional practices and improve student learning.


The first part of the book introduces the fundamental concepts of electricity, including the properties of electric charge, voltage, current, and resistance. It also provides an overview of the history and development of electricity.

The second part of the book focuses on the applications of electricity. It discusses the use of electricity in various industries, such as manufacturing, transportation, and communication. It also provides examples of different types of electrical systems, such as power systems, lighting systems, and control systems.

The third part of the book offers practical guidance on how to design and install electrical systems. It discusses the steps involved in planning and designing electrical systems, and provides examples of different types of electrical systems, such as power systems, lighting systems, and control systems.

Overall, this book is an excellent resource for anyone involved in the field of electricity. It provides a comprehensive overview of the fundamental concepts of electricity and offers practical guidance on how to design and install electrical systems. It is highly recommended for students and professionals in the field of electricity.

The Agricultural Education Magazine

BOOK REVIEWS

From the Nests of a Salmon Fisherman, by Laird Forester.


Dental Hygiene for Large Turf Irrigation Systems, by L. C. Herr.


A Selected List of Educational Materials Available, by J. E. Davis.


In FUN, by K. D. K. Amos.


Red Rock Country, by Donald B. Laurs.


Heritage of Plenty, by Harold D. Griffin.


American drought and heat stress among beef cattle, sheep, and cattle in the western United States. This is a comprehensive guide to the management of livestock in warm climates. It provides valuable insights into the effects of heat stress on animal performance and offers practical guidance on how to improve animal welfare and productivity.

The book is highly recommended for anyone involved in the field of livestock production in warm climates. It is a valuable resource for farmers, ranchers, and educators who want to improve the welfare and productivity of livestock in warm climates. It is highly recommended for anyone involved in the field of livestock production in warm climates.

The Agricultural Education Magazine

BOOK REVIEWS

From the Nests of a Salmon Fisherman, by Laird Forester.


Dental Hygiene for Large Turf Irrigation Systems, by L. C. Herr.


A Selected List of Educational Materials Available, by J. E. Davis.


In FUN, by K. D. K. Amos.


Red Rock Country, by Donald B. Laurs.


Heritage of Plenty, by Harold D. Griffin.


American drought and heat stress among beef cattle, sheep, and cattle in the western United States. This is a comprehensive guide to the management of livestock in warm climates. It provides valuable insights into the effects of heat stress on animal performance and offers practical guidance on how to improve animal welfare and productivity.

The book is highly recommended for anyone involved in the field of livestock production in warm climates. It is a valuable resource for farmers, ranchers, and educators who want to improve the welfare and productivity of livestock in warm climates. It is highly recommended for anyone involved in the field of livestock production in warm climates.

The Agricultural Education Magazine

BOOK REVIEWS

From the Nests of a Salmon Fisherman, by Laird Forester.


Dental Hygiene for Large Turf Irrigation Systems, by L. C. Herr.


A Selected List of Educational Materials Available, by J. E. Davis.


In FUN, by K. D. K. Amos.


Red Rock Country, by Donald B. Laurs.


Heritage of Plenty, by Harold D. Griffin.


American drought and heat stress among beef cattle, sheep, and cattle in the western United States. This is a comprehensive guide to the management of livestock in warm climates. It provides valuable insights into the effects of heat stress on animal performance and offers practical guidance on how to improve animal welfare and productivity.

The book is highly recommended for anyone involved in the field of livestock production in warm climates. It is a valuable resource for farmers, ranchers, and educators who want to improve the welfare and productivity of livestock in warm climates. It is highly recommended for anyone involved in the field of livestock production in warm climates.

The Agricultural Education Magazine

BOOK REVIEWS

From the Nests of a Salmon Fisherman, by Laird Forester.


Dental Hygiene for Large Turf Irrigation Systems, by L. C. Herr.


A Selected List of Educational Materials Available, by J. E. Davis.


In FUN, by K. D. K. Amos.


Red Rock Country, by Donald B. Laurs.


Heritage of Plenty, by Harold D. Griffin.


American drought and heat stress among beef cattle, sheep, and cattle in the western United States. This is a comprehensive guide to the management of livestock in warm climates. It provides valuable insights into the effects of heat stress on animal performance and offers practical guidance on how to improve animal welfare and productivity.

The book is highly recommended for anyone involved in the field of livestock production in warm climates. It is a valuable resource for farmers, ranchers, and educators who want to improve the welfare and productivity of livestock in warm climates. It is highly recommended for anyone involved in the field of livestock production in warm climates.
Stories in Pictures

by Richard Douglass

LEARN NEW SKILLS (Photo from J. C. Simmons, Area Supervisor, Louisiana)

Mobile Summer Classroom
(Photograph courtesy In celebration, May '72)

Organized Summer Classes
(Photograph courtesy Toni Hatakeyama, Hawaii)

Summer Tasks for Vocational Agriculture Instructors

Student Followup
(Photograph courtesy Peter M. Johnson, Massachusetts)

Equipment Upkeep
(Photograph courtesy Richard Douglas)

Theme—Career Education: Unique Instructional Programs and Materials