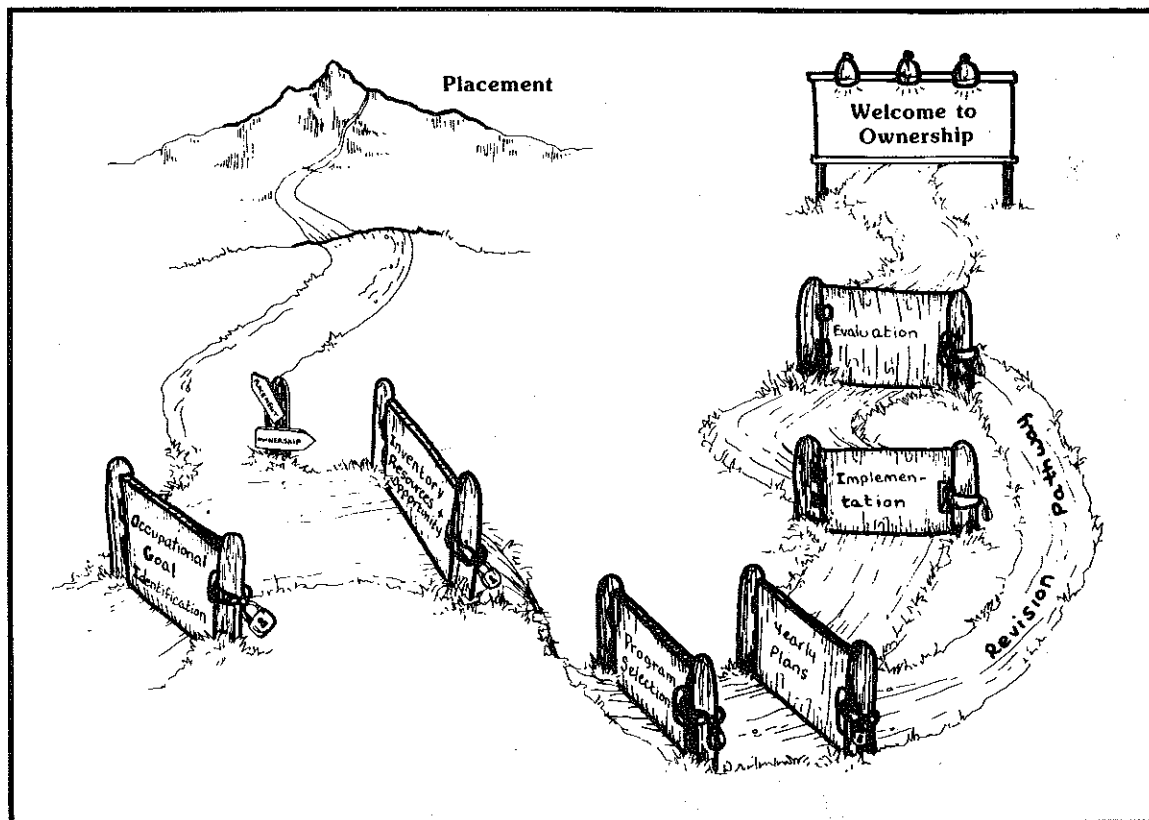


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THEME:

SOEP: Entrepreneurship

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Table of Contents

Editor's Page		
SOEP: Our Uniqueness	Larry E. Miller	3
THEME: SOEP: ENTREPRENEURSHIP		
Guiding Students Into Entrepreneurship	Ed Osborne	4
Preparing Students To Be Entrepreneurs	Martin Auville	5
Developing Entrepreneurship	Dave Wilson	7
Entrepreneurship: A Pathway	Larry R. Arrington and Max B. McGhee	9
Farms and Firms: The Profit Connection	Edgar Persons	10
Entrepreneurship in FFA Awards Programs	Robert Seefeldt and Tammy Meyer	13
Using Records in Decision Making	Daniel A. Fetters	16
Student Dissatisfaction with SOE Programs	Phillip Zurbrick	18
Start Your Students Off With a Personal Resource Inventory	James L. Burcher and John R. Crunkilton	20
Improving Projects Through Exhibition	Verlin Hart	22
STORIES IN PICTURES		24

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Articles and photographs should be submitted to the Editor, Regional Editors, or Special Editors. Items to be considered for publication should be submitted at least 90 days prior to the date of issue intended for the article or photograph. All submissions will be acknowledged by the Editor. No items are returned unless accompanied by a written request. Articles should be typed, double-spaced, and include information about the author(s). Two copies of articles should be submitted. A recent photograph should accompany an article unless one is on file with the Editor.

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SOEP: Our Uniqueness



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

Early in the development of humankind, persons joined together into tribes that were bound together by some common element. The common element that bound together the tribe might have been kinship, safety, mysticism, or the need to hunt in mass to procure food. People join together because a group can help them and there is commonality in purpose. Dissonance results from the lack of that common purpose.

Vocational agriculture teachers constitute a group. The group has common purposes, and is a subset of the larger community of teachers. What is there that is unique about our curriculum and profession that holds us together as a tribe? How are we unique? How are we different from other teachers?

Surely, there are some unique elements to our rituals, teaching, that sets us apart other than the nature of the subject matter we teach. I would submit that the Supervised Occupational Experience Program (SOEP) concept is one element that sets us apart.

The sages of our tribe have passed down from generation to generation of teachers within our tribe of vocational agriculture teachers the philosophy underlying this unique component and the best procedures for executing SOE programs. Every teacher should have had instruction, both formal and informal, that has made them intimately familiar with both the why and the how of SOE programs.

Environmental Changes

The tribe has been emigrating though, and the environment and culture has changed during the transmission of this knowledge. Students in our classes today are not necessarily farm reared. Indeed, farm reared students may constitute a small minority in many of our programs. Student needs have changed. Only a very small percentage may aspire to enter production agriculture. This is often wise, as it is congruent with the opportunities present. Our students may aspire to enter one of the other taxonomy areas. Or, students may be enrolled in prevocational, career exploration programs.

The advice we as teachers received on the how and why of SOEP has not always been a template that can be applied to each student. Teachers have become frustrated and dissonance has occurred. Rather than be banished from the tribe, some teachers have remained mute on the issues surrounding SOEP. Others have ignored SOEP entirely as a part of the vocational agriculture program.

Some agricultural educators have continued to advocate strong SOE programs. Such programs, they maintain, is what makes vocational agriculture really vocational. They are not just the production agriculture teachers.

Some tribes and cultures have persisted throughout time in spite of being conquered, of being enslaved, or of

numerous other adversities. Their commonality and uniqueness often provided the wherewithall to persist and to continue to exist.

Supervised occupational experience programs are a unique feature of programs of vocational agriculture. It is one of the common elements that holds us together and simultaneously sets us apart from other instructional programs.

Common Purpose

Retribalization is essential to our profession. We must see the commonality of our purpose as a tribe. The trite saying of "one for all and all for one" fittingly describes the best way we can eliminate our dissonance. To achieve once again the tribal status, a thorough understanding of what is and what ought to be regarding SOEP is essential. Therefore, this issue and all themes for 1984 will focus upon SOE programs.

The diversity of the themes related to SOEP, it is hoped, will help the profession to once again grasp the utility of the concepts related to SOEP. This conceptualization should help place parameters around legitimate SOEP programs and experiences. So all may see that, while some may take a different road, we are all headed to the same place. Hopefully, we can untangle some of the loose ends of our philosophical framework, see the commonality of our purpose, realize the need for SOEP, and once again become of one tribe.

The Cover

The pathway for entrepreneurs is discussed in the Arrington and McGhee article in this issue.

Guiding Students Into Entrepreneurship

At one time in the rich history of vocational agriculture, entrepreneurship was the key ingredient in nearly all SOE programs. But as the nature of agriculture and vocational agriculture changed, SOE programs began to take on a different look. Student opportunities for traditional ownership programs diminished, and SOE was no longer synonymous with entrepreneurship.

Placement programs became commonplace, and teachers began to identify many alternative SOE programs that their students could undertake. They began to sense that ownership programs were not possible for a great number of their students. A variety of what might be called simulated ownership experiences, such as in school laboratories, appeared in which students pretended to be owners/managers of a particular venture.

Renewed Interest

What seems to be taking place now, not only in vocational agriculture but throughout education and work, is a renewed interest in entrepreneurship. Vocational agriculture teachers are now discovering that entrepreneurship SOE programs can be established for many of their students. Creative SOE ownership programs have rekindled the entrepreneurial flame.

In addition to the traditional ownership programs in livestock and crop production, more and more successful ventures in emerging entrepreneurial areas have surfaced. Teachers have begun to realize that the practice of entrepreneurship involves the same basic principles, regardless of whether the student is producing game birds, operating a machinery repair business, raising livestock, or producing bedding plants. Perhaps the new flavor of SOE entrepreneurship programs is a signal of the improved adaptation and flexibility that teachers have begun to exercise. As student characteristics and interests change, so must our approaches to teaching through SOE programs. Perhaps, too, vocational agriculture teachers are gradually becoming more adept at working with individual students to develop viable SOE programs.

Individualizing

Although a large number of vocational agriculture students have typically been involved in entrepreneurship programs, research has shown that most entrepreneurial ventures of substantial scope are undertaken after age 25. Why, then, are we concerned with preparing entrepreneurs in our secondary and post-secondary programs? The reasons are simple, yet significant. Firstly, students may



BY ED OSBORNE, THEME EDITOR

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expand their long-term career alternatives to include entrepreneurship if such instruction is provided. Secondly, by knowing the requirements for successful entrepreneurship, students can plan their education and work so that it best supports the long-term goal of business ownership.

The strength of SOE programs by design is their uniqueness. Just as every student does not have the same SOE, every student cannot be expected to enjoy the same degree of success in managing an ownership program. Successful entrepreneurs have been found to exercise a strong need for achievement, believe their decisions control their destiny (internal focus of control), have a high risk-taking propensity, and possess effective leadership skills. Thus, entrepreneurship programs should fit the student, and the student should be suited to becoming an entrepreneur.

Theme Articles

The articles in this special theme issue deal with some of the critical aspects of developing entrepreneurial skills, such as long-term planning, risk-taking, keeping records, and making business decisions. Several articles also include examples of successful SOE entrepreneurship programs currently underway. These readings should cause agricultural educators to examine the value, feasibility, and nature of SOE entrepreneurship programs in vocational agriculture today. They may also prompt us to display some traits of entrepreneurs; optimism, initiative, innovation, resourcefulness, foresight, and versatility; as we guide students into entrepreneurial ventures through SOE programs.

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Coming in February . . .

SOEP: PLACEMENT PROGRAMS

Preparing Students To Be Entrepreneurs

Webster defines an entrepreneur as a "person who organizes and manages a business or industrial enterprise, taking the risk of not making a profit and getting the profit when there is one". If vocational agriculture is to be a truly vocational program, then entrepreneurship certainly has a place in our program planning.

When entrepreneurship and supervised occupational experience programs mesh together, we feel that it represents a top notch SOE program. Ideally, it would be great if every student could eventually become an entrepreneur in some business venture. Realistically though, we must recognize that entrepreneurship will be the end goal of some, but not all students.

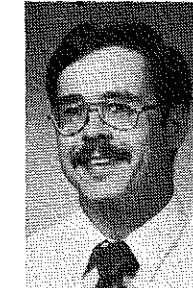
This should not bother us as educators, however, SOE programs are exploratory and experimental by design, so if a SOE program is not economically successful or self-fulfilling for the student, it cannot be termed a failure. Entrepreneurship is a means of investigating a possible occupational choice.

Understanding Business

Entrepreneurship in SOE programs not only involves ownership of production enterprises, but also ownership in agribusiness. Some entrepreneurship programs in agribusiness include a small engine repair business, a lawn mowing service, or ornamental plant production.

For students with these kinds of SOE programs, entrepreneurship yields very positive effects. Students have more pride and interest in SOE programs which they own and manage. These programs also develop responsibility and decision making skills.

Students learn to plan for an enterprise, to prepare budgets, and to analyze enterprise outcomes. With successful SOE programs which involve ownership, students learn that they can become economically successful on their own. Achieving success is an important factor in student motivation.



BY MARTIN AUVILLE

(Editor's Note: Mr. Auville is a Vocational Agriculture Instructor at Ft. Defiance High School, Ft. Defiance, Virginia 24437.)

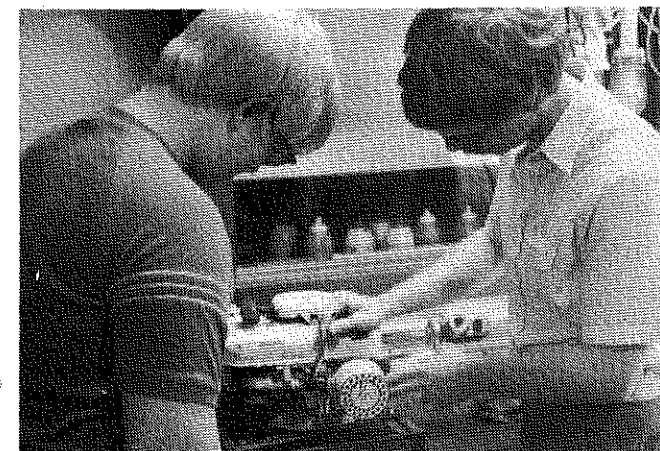
Understanding the elements of entrepreneurship is also important to those students who do not have ownership-related programs. All students will benefit from instruction that deals with being an entrepreneur. Granted those students with SOE programs which involve ownership will probably be helped the most by such instruction. However, students with placement or other types of programs also need this instruction. Young people are commonly criticized for not understanding the business world. If nothing more, positive attitudes toward entrepreneurship and respect for those who are successful entrepreneurs can be developed. Students who eventually become employees in an agribusiness may then be able to better understand entrepreneurship and how management decisions made by the business owner affect them.

Teaching Entrepreneurship

The next logical question is how to teach students to become successful entrepreneurs. All three areas of vocational agriculture (classroom instruction, FFA, and supervised occupational experience programs) need to be involved in teaching entrepreneurship. Each area should complement the others.

To set the stage for developing the skills involved with student entrepreneurship, students need to have classroom instruction that pertains to the basics. Units on starting a

(Continued on Page 6)



Technical and agribusiness skills are both needed by the successful entrepreneur. (Photographs courtesy of Jerry Pepple, Agricultural Education Division, University of Illinois, Champaign, Illinois 61820.)



Preparing Students To Be Entrepreneurs

(Continued from Page 5)

business, managing a business, and evaluating business adventures will be needed.

For many vocational agriculture programs this also means that more instruction will have to be provided on agribusiness topics. Certainly, special emphasis needs to be placed on the art of selling, advertising, merchandising and marketing, business procedures and records, and business management.

Some teachers may claim that this represents a complete divorce from the production end of the curriculum, but production topics still need to be taught. We must realize that a farm is a business and that we need to provide more instruction to address the business component of the farm.

Progressive farmers are directing more attention to product promotion and marketing. Modern farm record keeping systems rival those kept by agribusinesses in many ways.

Viewed in this fashion, it becomes fairly easy to justify agribusiness units to production-oriented students. Many of these agribusiness units are just as relevant to a farm business as they are to an agribusiness.

In order for classroom instruction on entrepreneurship to be relevant, it must be tied to the occupational experience programs of the students. If this connection is made, entrepreneurship programs can include two basic designs.

As mentioned earlier, SOE ownership may involve ownership in production enterprises or ownership in an agricultural business. Basically, the same concepts of entrepreneurship apply to both areas. How we approach teaching SOE and entrepreneurship may vary, but the objectives are the same; we are still attempting to teach the same key points.

For example, when students first select SOE programs, they consider many of the same factors in either agribusiness or production entrepreneurship ventures. They must consider their personal interests, skills, and abilities; the resources that are needed; and local market conditions. These factors apply to both production enterprises and agribusiness enterprises.

Likewise, budgets need to be prepared, goals need to be set, and plans need to be made to reach these goals. Again, these activities apply to both entrepreneurship program designs. Even the final analysis of the two different entrepreneurship programs has similarities.

The bottom line is efficiency and profit. Different formulas may be used, but the SOE programs are basically measured and accomplished the same way.

In preparing for instruction on entrepreneurship, a good starting point is the Supervised Occupational Experience Handbook that has recently been made available to vocational agriculture teachers. This reference explains the role of ownership SOE programs. Part III, Plan B addresses ownership directly and offers suggested teaching techniques. Transparency masters are included to aid the teacher.

Individualized and Group Instruction

Group instruction will provide a starting point for developing entrepreneurship programs, but individualized instruction is necessary to tailor the program to fit the needs of the individual student. The best means for providing the individual instruction is the farm or business visit, where the fine points of the entrepreneurship program can be examined.

This gives the opportunity to provide instruction that is unique to agribusiness or production-oriented ownership programs. Instruction provided by this means can help to rectify the differing levels of ability and interest that exist between individual students. Individual instruction makes the difference between ownership SOE programs which are mediocre, and those which are outstanding.

Using the FFA

FFA awards should reflect additional recognition for students who have entrepreneur-type SOE programs. By design, students with placement SOE programs cannot be compared to others, since the programs seldom involve entrepreneurship. However, if students have the opportunity to develop ownership programs, then extra recognition should be given to those students who do have an invested interest in their SOE program. Some FFA awards, and all degree applications already account for student ownership. On the chapter level, awards need to account for ownership, or percent of ownership, especially when star chapter awards are considered.

To promote entrepreneurship in any vocational agriculture program, SOE programs, FFA recognition, and classroom instruction will have to complement and reinforce the importance of ownership. Not only is an understanding and application of entrepreneurship important to the student, it also makes vocational agriculture more vocational.

Share Your Ideas By Writing About These Remaining 1984 Themes

SOEP: Placement Programs February
SOEP: Cooperative Experience Programs March
SOEP: Laboratories April
SOEP: Urban Programs May
SOEP: Recordkeeping June
SOEP: Sales and Service July

SOEP: Horticulture August
SOEP: Mechanics September
SOEP: Forestry, Conservation and
Recreation October
SOEP: Adults November
SOEP: Post Secondary December

THEME

Developing Entrepreneurship

Although the steps to success are described differently by many groups and individuals, most would agree that setting goals is important. As vocational agriculture teachers, one of our goals is to develop entrepreneurial skills.

An entrepreneur is a person who undertakes a business venture for making profit on an investment. Such a person manages and assumes the risk of business.

How do vocational agriculture departments develop these skills? I find SOEP's to be the ideal tool. Young people, prior to adult responsibilities, are in a perfect position to develop entrepreneurial skills which will be used their entire life.

The essential qualities of successful entrepreneurs can be divided into six major categories with each consisting of several subcomponent skills:

- I. Self-Confidence
 - A. Confidence in ability to make good decisions
 - B. Independence, individuality
 - C. Optimism
 - D. Leadership, dynamism
- II. Originality
 - A. Innovation, creativity
 - B. Resourcefulness
 - C. Initiative
 - D. Versatility, knowledge
- III. People Orientation
 - A. Ability to get along well with others
 - B. Flexibility
 - C. Ability to accept suggestions/criticisms
- IV. Task-Result Orientation
 - A. Need for achievement
 - B. Recognition of profit motive
 - C. Persistence, perseverance, determination
 - D. Drive, energy



By DAVE WILSON
(Editor's Note: Mr. Wilson is a Vocational Agriculture Instructor at St. Joseph-Ogden High School, St. Joseph, Illinois 61873.)

- V. Futurism
 - A. Foresight
 - B. Perceptiveness
- VI. Decision Making Ability
 - A. Risk taking ability
 - B. Ability to face challenges successfully

Goals set by students should be intelligent, realistic, and long-term. When SOEP's are established, the groundwork is laid for developing entrepreneurship. SOE programs, when established in realistic settings, are usually dependent upon the ability of the student to utilize their capital resources and apply their skills. These programs require students to make business decisions and reinforce the reality of the entrepreneurial effort. An end result is that students learn and practice the risk taking.

In order to establish entrepreneurships, we need to start in the vocational agriculture classroom. Many students are attracted to vocational agriculture because of the importance placed upon entrepreneurial skills. These skills are used by many people to some degree and in various combinations. People who learn to manage these skills early often become self-employed entrepreneurs while those learning to fully control entrepreneurial characteristics at an older age often rise to fill positions in management.

(Continued on Page 8)



SOE ownership programs can involve a variety of enterprises such as horseradish.



Pheasant production is just one of many business ventures in which students can engage.

Developing Entrepreneurship

(Continued from Page 7)

Planning

Starting SOE programs means making decisions. Many entrepreneurship programs are started as a result of the vocational agriculture class. Cooperative efforts from students, parents, and instructors can lead to SOEP's that develop career opportunities, agricultural competencies, and the human relations and leadership skills needed to fulfill occupational and social responsibilities and make good business decisions.

SOE programs allow students to explore and experience entrepreneurship in a gradual and purposeful way. As a result, students are better prepared to take advantage of ownership opportunities when they arise.

Unlike short term projects, the SOEP should be planned as a continuous, on-going program. These on-going programs require students to evaluate their efforts and make the needed changes over a period of time. The analysis and record keeping phases of the SOEP provide students with the opportunity to develop business management skills and implement technical innovations. Updating allows students to exercise resourcefulness, initiation and flexibility in their program.

Case Studies

The SOE program conducted by Ellyn Paul, a recent graduate of St. Joseph-Ogden High School, illustrates how important resourcefulness is in entrepreneurship programs. Ellyn has increased her pheasant program from 200 birds to over 800 birds. This increase produced a marketing dilemma. What should she do with 800 processed and frozen pheasants? Ellyn drafted a sales flyer and created an advertising program. Prospective customers were identified and flyers were put into the mail. She was

able to sell all the birds and she proceeded to set new goals for her business.

Ellyn started her SOEP as a result of her vocational agriculture class and the influence of her father and brother. She started with seven birds and presently has over 800. She resides in a rural area on a one and one-half acre lot. To supplement her pheasant enterprise, Ellyn has a one-half acre horseradish plot, which is operated on a 50/50 rental agreement. The horseradish is grown, harvested, processed, and marketed on a wholesale level to local business organizations.

Scott Anderson enrolled in vocational agriculture because he planned to return home to farm. Scott started his SOEP by obtaining a loan to finance the purchase of five gilts at a purebred sale. As the gilts farrowed, Scott used his technical skills to improve efficiency and profit. Housing facilities and equipment were purchased with money remaining after expenses were met. Within two years, Scott had 32 sows farrowing twice per year and enough income to start farming in partnership on the family farm.

I find that some tend not to include farmers as entrepreneurs, but farmers are perfect examples of people using entrepreneurial skills. The skills of managing, working with others, using initiative, planning for the future, assuming intelligent risks, and working toward a profit are all elements of instruction in vocational agriculture. Vocational agriculture programs are graduating students who are better prepared to overcome the obstacles on the road to success in entrepreneurship. Many students in vocational agriculture programs today are involved in ventures that allow them to apply entrepreneurial skills. If we teachers can provide an environment that encourages students to develop entrepreneurial abilities, then individual entrepreneurship can become a reality through supervised occupational experience programs.

TEACHING TIPS

Corning Introduces Five pH Meters In New Product Line

Corning Science Products has introduced a new line of five easy-to-operate pH meters with a unique "delta" shape and unified display which allow easy use and quick reading from the laboratory benchtop.

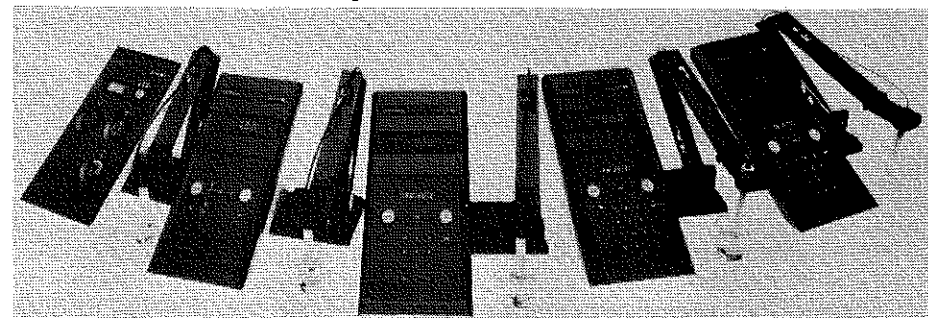
Beginning with the Model 120, a lightweight, battery-operated meter for use in the lab or in the field, the new line ranges upward to the Model 155, a pH/ion meter for all research applications which feature known and sample addition/subtraction modes, step-by-step alphanumeric prompting in five languages, automatic buffer recognition, three-decimal accuracy, a digital clock and timer, and activity and memory functions capable of accommodating a five-electrode testing system. Models 140, 145 and 150 provide additional features.

Simply labeled for quick calibration, the new Corning pH meters are designed for rugged durability in a laboratory or field setting. Cases are made of molded structural foam with keypads of polyvinyl chloride especially coated to withstand chemical spills. All new Corning meters are supplied with a plastic barrel combination electrode with Corning's exclusive replaceable

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THEME

Entrepreneurship: A Pathway

Have you ever heard that "to fail to plan is to plan to fail"? This statement probably applies to no other component of vocational agriculture as much as it does to the development of entrepreneurship (ownership) supervised occupational experience programs. The objective of ownership programs is to assist students in developing competencies needed to own and manage production agriculture or agribusiness enterprises. To accomplish this objective, a long-range plan developed by the student in conjunction with teachers, parents, and others involved in the experience program is a necessity. Without it, the objective of efficiently and effectively organizing, managing and assuming the risks of an agricultural endeavor will not be realized.

Prerequisites

Before students can begin to develop long-range plans for entrepreneurship programs, two prerequisites are essential. First, the students, as well as the parents and others involved in the agreement, must understand the fundamental principles regarding supervised occupational experience programs. It is imperative that students understand the importance of the different activities and how the SOE program fits into the total vocational agriculture program. Students cannot be expected to make long-range plans about a program they do not understand.

The second important prerequisite to long-range planning is to provide instruction on writing plans. More than likely, planning for ownership will be the students' first exposure to identifying specific strategies to reach a long-range goal. Therefore, as with any new experience, the students must be given direction and supervision for effective learning to occur.

Suggested questions that need to be answered in this teaching process include:

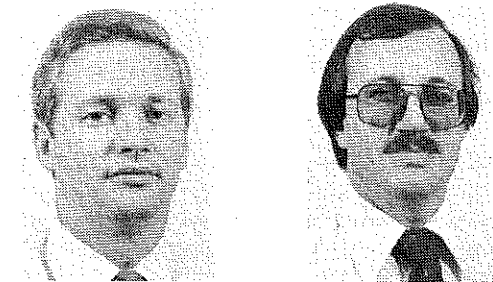
- Why write plans?
- How will a plan help avoid mistakes?
- What are the components of a good plan?
- Who should be involved in planning?

Showing students examples of individual student program plans that have been developed in previous years is necessary for students to realize that long-range planning is possible. Viewing other plans will also stimulate students to think about opportunities they might have to become entrepreneurs.

A Model

A long-range plan helps to examine or identify where students are today, where they want to be when they leave the program, and how they are going to get there. A simple strategy for long-range planning is illustrated in Figure 1, which shows a pathway that leads to agricultural enterprise ownership. This pathway has six gates which must be opened in order for students to reach their destination.

The first gate to be opened in the long-range planning process is for students to specifically identify their occupa-



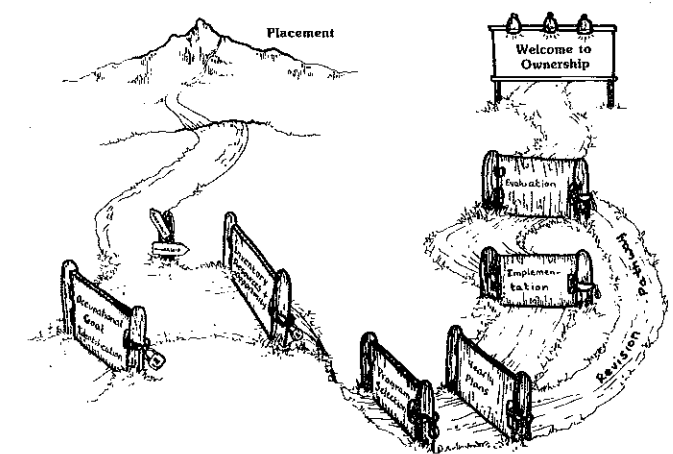
BY LARRY R. ARRINGTON AND MAX B. MCGHEE
(Editor's Note: Dr. Arrington is an Assistant Professor and Dr. McGhee is an Associate Professor in Agricultural and Extension Education at the University of Florida, Gainesville, Florida 32611.)

tional goals. Occupational goals can determine student involvement in ownership programs, placement programs, or both. Teacher guidance is most important at this gate.

The student must then inventory resources and opportunities available to begin a program. To open this gate, the student must consider such factors as (1) the home situation, (2) community situation, (3) financial resources available, and (4) labor requirements.

Frequently, students will have the needed resources made available through their home situation. However, because of the variety of agricultural programs available to students today, the teacher must help students look beyond the home situation for ownership opportunities. For example, students in horticultural programs might consider working toward owning a lawn maintenance business or a landscaping business. Likewise, a student in natural resources management might become an entrepre-

(Continued on Page 10)



Pathway for Entrepreneurs
Figure 1

Entrepreneurship: A Pathway

(Continued from Page 9)

neur in a hunting or fishing guide business. A student of agricultural mechanics might develop plans to become established as the owner of a small engine repair service. All of these examples of ownership programs could conceivably be planned and implemented by students who have limited facilities.

We must remember that many students live in apartment complexes, condominiums, or other nontraditional (for vocational agriculture, at least) residences. These situations do not provide the agricultural production project opportunities that many traditional teachers of vocational agriculture perceive as being the only type of acceptable ownership project.

Based upon information gathered through the inventory, students, with guidance from the teacher, open another gate by selecting programs that will maximize ownership opportunities, as well as provide as much management experience as possible. Selected programs should have the potential of being profitable, while giving students a chance to accumulate business components (machinery, equipment, land, capital, etc.) that will promote self-employment.

Once the experience program has been selected, students must then enter the fourth gateway by developing a year-by-year outline of projected accomplishments, including the establishment of production and efficiency goals. This outline must identify those competencies required for student ownership.

Careful attention must be given to ensure that this year-plan (1) increases in size and scope each year, (2) provides students an opportunity to analyze records and evaluate programs each year, (3) provides opportunities

for student involvement in improvement projects and supplementary activities, and (4) leads students into partial or full ownership.

Now the students are ready to open the implementation gate and begin their first year of an entrepreneurship experience. In most cases the program will begin gradually with the students' share of the business being small, as might also be the case for traditional agricultural production programs.

As student labor and other contributions increase, ownership increases and partnerships form. If students start their own businesses, investment in various necessary inputs (machinery, equipment, land, labor) may be limited. As their businesses progress, they are able to reinvest to increase the size and scope of their ventures.

A final but necessary gate along the pathway is evaluation. In the case of planning for entrepreneurship, students should annually evaluate their programs. This evaluation requires a careful analysis of records and achievements in comparison to yearly goals. In addition, an assessment of progress toward obtaining the competencies necessary for achieving ownership is necessary.

Students should also study next year's previously-established objectives in their plan. They may need to change these goals based upon the previous year's events, i.e., students may have to take a side trip on their route to entrepreneurship via the "revision pathway".

In summary, the secret to achieving the ownership of an agricultural venture through vocational agriculture is not to fail to plan, but to plan to succeed. Students must open the gates and identify occupational goals, inventory opportunities, select programs, set yearly objectives and plans, and use plans as guides for implementation and evaluation. The teacher provides guidance, encouragement, advice, and instruction that enable students to successfully pass through the gates and traverse the pathway to entrepreneurship in agriculture/agribusiness.

THEME

Farms and Firms: The Profit Connection

Entrepreneur: (an/tre•Pre•nur'n.) One who undertakes to start and conduct an enterprise or business, usually assuming full control and risk.

When vocational agriculture became more than education for present and prospective farmers, the profession coined new phrases to describe the emphasis: "agriculture is more than farming;" "agribusiness"; "non-farm agriculture occupations" — to name but a few. The emphasis in non-farming agriculture was, and still is, to a large extent, on the development of skills, knowledges and attitudes that prepare students to become good employees in the broad field of agriculture.

For every employee, however, there must be an employer. In agricultural business many employees are their own employers. They are true entrepreneurs that start and conduct a business, assume both control and risk, and employ both themselves and others. To gain a better perspective of



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the magnitude of business ownership in almost any community, one needs only to visually canvas the businesses up and down mainstreet and determine the number of agricultural businesses that are small. It would be an unusual town or city where the canvas showed less than 80 percent of the businesses to be small.

Small is not synonymous with insignificant. The small businesses in this country employ over half of the work force, provide slightly less than half of the GNP, create the majority of new jobs, and invent or create the majority of the new technology which we employ in business and industry and on farms.

Vocational agriculture needs to participate in a more significant piece of the action. We need to turn some of our attention to training future employers as well as employees for non-farm businesses, just as we have successfully prepared students to be farmers. We have the tools. They only need to be uncrated, polished up, sometimes modified, and put to work. The parallels between education for successful farm management, a time-honored goal of vocational agriculture, and non-farming business management are real, not imagined.

Guiding Principles

The key connector between farm and non-farm business management is the entrepreneurial goal: profit. Both farm and non-farm businesses operate under the premise that management of the firm and farm is successful when the resources of land, labor, capital and management have been utilized in such a way that they will produce the maximum continuous profit consistent with the other family goals.

Furthermore, both the farm and firm ascribe to the concept that to be most successful, they must maximize the return to their scarcest resource. These two principles, combining the resources and maximizing returns to scarcity, are the essence of the entrepreneurial role. Add to these principles the concept of control and the concept of risk-bearing and you have the basic elements of entrepreneurship. Season with a liberal amount of informed, orderly decision making and the result is a successful entrepreneur!

Operating Principles

Perhaps it is ironic that we so readily ascribed to the idea that farming is a business and failed to connect with the idea that non-farm agricultural business is also a business. There must be similarities, and the similarities lie in the economic principles that make business tick.

Most vocational agriculture instructors have more than a nodding acquaintance with economic principles. We

recognize the laws of diminishing marginal return, opportunity costs, supply and demand, fixed/variable costs, resource and product substitution as examples of the common everyday rules that apply to agriculture.

What we fail to recognize is that these same principles are the laws of all business operation. If that is the case, and it truly is, then instructors can at least start in building some competence in non-farm business management among students by demonstrating the universality of the economic principles.

Take, for example, the law of diminishing marginal return. The most common example used in an agricultural context is to determine the point at which the cost of the added (or marginal) input of fertilizer will be paid for by the added (or marginal) output of a crop such as corn or wheat. It is an easy example to use in agricultural instruction. It is a principle applied frequently in decision making by farmers and is generally readily understood by students.

However, it is less common to see the same principle applied to business, even though it is equally applicable. To test your own understanding of that principle, simply substitute "advertising budget" for "fertilizer" (the variable resource) and "dollars of sales" for "corn". It is the same principle. It has the same application. Understanding and applying it has the same effect on profit in both the farm and the firm.

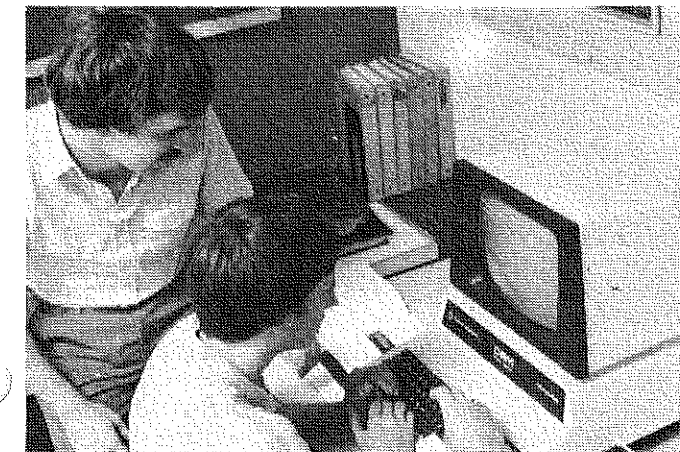
You can draw the same parallels between the farm and business firm with each of the economic principles. They are the common denominators of doing business. They are the connections we can use in agriculture to concentrate more attention on basic elements of entrepreneurship.

Decision and Risk

While decision-making and risk-taking appear to be unrelated activities, they occur together. They are the elements that combine to define an essential characteristic of entrepreneurs.

While employees may be assigned tasks that include decision-making, the decisions are made with only limited risk to the employee. Bad decisions by an employee may at worst only jeopardize his or her job. On the other hand, the decisions made by, or on behalf of the entrepreneur can

(Continued on Page 12)



Learning the principles of operation of a business are essential to the success of the entrepreneur. (Photographs courtesy of Jerry Pepple, Agricultural Education Division, University of Illinois, Champaign, Illinois 61820.)



Farms and Firms: The Profit Connection

(Continued from Page 11)

have far-reaching effects, including loss of both the entrepreneur's and creditor's capital investment.

One of the tasks of vocational agriculture instructors is to teach students how to make orderly decisions. By practicing the decision-making process in the context of non-farm business enterprise, as well as farms, students should soon recognize the importance of sound decision-making to business success. Many examples of good decision-making can be drawn from the mainstreet businesses with which the instructor is familiar.

Coupled with practice in decision-making is the need to understand risk. How do people's attitudes toward risk vary? How can risks be controlled? How do the risks involved and the attitudes toward risk affect decision-making behavior? Once students have at least a basic understanding of these questions, they will be more able to play the entrepreneurial role as employers and will understand better, if employees, why employers behave the way they do.

Functions of Managers

Whether the manager manages a farm or non-farm business, there are certain functions of management that must be performed if the business is to succeed. Students must be reminded, however, that even superior performance in each function does not guarantee success; it only increases the probability of success.

Students in vocational agriculture will be quick to see the parallel functions between farms and business firms, and should see the relative importance of these functions in different settings.

Functions of Management

Planning

Much of what is taught in vocational agriculture contributes to understanding the planning function. The student who sets his or her sights on attaining the American Farmer Degree has grasped one of the key concepts in planning: goal setting. There should be recognition that the plan is a series of constantly modifying short, intermediate and long term goals or objectives. However, goals without plans of action do not accomplish much.

For the potential business operator as well as the farmer, there must be a good understanding of financial planning as well as the operational planning of the business. Students who develop a good knowledge of planning tools, like cash flow projections, enterprise budgeting, capital investment planning, credit acquisition and payback, and profit/loss projections will be well-equipped to perform the planning function.

Organizing

Many businesses, both farm and non-farm, falter when it comes to the organizing function. Organizing requires a lot of thought. It is not easily taught or simulated in the classroom, since the appropriate way to organize may vary with each business.

It is possible to teach about organizing if you think about the things that must be organized. Generally,

these fall in three categories: time, talent and facilities. Of these, time and talent are most often lost sight of in managing the farm or business. Allotting time for the operational tasks outlined in planning and deciding who should do the job are important concepts to talk about and practice. Since both farms and non-farm agricultural businesses usually have only a few people to do the work, getting the work done effectively and efficiently is one of the keys to success.

Coordinating

We often hear people in business and on farms lament about the lack of communication among the workers in the business. Developing clear channels and procedures for communication is an important function of management.

But along with communication comes the idea of delegating responsibility and authority. Some farms are excellent places to observe how delegating works, since the areas of responsibility are clearly different and visible. In multiple operator farms, you may find one operator responsible for livestock, one for crops, a third for machinery maintenance and repair and someone else responsible for records and accounts. While delegation in business may not be quite so visible, the farm situation described illustrates what is meant by delegation. It needs to be clear that delegation is not just a division of work, but rather a delegation of responsibility and authority.

Controlling

Controlling is the set of reins that keeps the business on the road toward goals and objectives. But because farms and business firms do not physically move, managers need other non-visible measures to tell them if the business should pull left, right, speed up or slow down. Here is where records and accounts of all kinds provide the data to assess the position of the business. The financial records show the speed at which the business or farm is moving. The other records of production and performance help keep the farm or business on track.

One of the hot items for farmers is the search for good management control systems. Management control systems for dairy cows, for example, keep track of breeding performance, pregnancy checks, health problems, production levels and a host of other activities related to the dairy herd. The objective is to not only help farmers in organizing their work, but to alert them to the progress and direction the dairy herd is taking in relationship to the established goals.

The same concept of management control applies to business. For example, constant checking of the inventory of individual items in the retail farm store alerts the manager to the need to reorder stock, to change the mix of goods, and to offer special sales on slow-moving items. Controlling the business, not just letting it happen, is the mark of a good manager and an essential quality in a successful entrepreneur.

Appraising

Sometimes called evaluation, appraisal is the long term view of where the business and its resources have been and where they are headed. While both business and farms engage in appraisal, it is likely that the emphasis is slightly different. Business may attach more emphasis to personnel appraisal (the labor resource) while the farm may concen-

trate on the physical resources. In either case, it is a check to be made against policies, procedures, resource use and goals.

These five functions of management can serve as the organizer for a core of study about and for business operation and ownership that is applicable to both farms and firms. Students who may some day own and operate a business will find them invaluable. Students determined to be employees will find that a good understanding of what makes business tick will contribute to their own productivity and level of satisfaction; both of which should be rewarded by the business entrepreneur.

The Importance of Management

In all of the studies of why businesses fail, the primary

cause is laid at the doorstep of poor management. Since management is so many things, it is easy to see how the failure to perform the functions of management, understand the principles or make good decisions can be the leading cause of failure.

Vocational agriculture teachers have always been noted for their optimism and positive attitudes. The task has always been to foster success, not to prevent failure. In business management/entrepreneurship, we can do both. We can build into the curriculum those ideas, concepts and principles that are known to contribute to success, and by doing so we can alleviate the chance that lack of management knowledge and skills will cause a business to fail.

THEME

Entrepreneurship in FFA Awards Programs

Of all the teachers employed at the local high school, vocational agriculture instructors hold a unique position. They have the opportunity, through supervised occupational experience programs, to provide instruction and practical hands-on training needed by students to become entrepreneurs, the owners of agriculture/agribusiness enterprises.

The vocational agriculture program also serves as an essential teaching tool for the practical application of technical skills and lessons in leadership, cooperation and citizenship. All of these elements are vital to being a successful entrepreneur in modern agriculture/agribusiness.

Success is a measurement of how people are in getting from where they presently are to where they want to be sometime in the future. To be a successful farmer or agribusinessperson requires years of preparation and practical experience. Due to the length of time involved, the young person who begins setting goals and developing plans while still in high school will have a jump on the rest of the pack.

FFA Programs

The FFA has two programs through which students can earn recognition for excelling in establishing entrepreneur-type supervised occupational experience programs. The Agricultural Proficiency Award Program is designed to stimulate interest in the vocational agriculture instructional program and recognize individual FFA members for their exceptional accomplishments in progressing toward specific occupational objectives in agriculture. The American Farmer Degree, the top of the degree ladder, recognizes FFA members whose supervised occupational experience programs show continued growth, expansion and improvement in either production enterprises and/or job skills that relate to the establishment in a chosen agricultural occupation.

In recent years an increasing number of errors, omissions and other misreported information has been noted on



By ROBERT SEEFELDT AND TAMMY MEYER

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Figure 1
Scope, Income and Expense Summary

YEAR	19__	19__	19__	19__
KIND OF ENTERPRISE (SIZE)	()	()	()	()
KIND OF ENTERPRISE (SIZE)	()	()	()	()
KIND OF ENTERPRISE (SIZE)	()	()	()	()
INCOME AND EXPENSE SUMMARY FOR ALL CEREAL GRAIN ENTERPRISES				
INCOME				
1. Closing Inventory				
2. Cash Sales				
3. Value of Products Used at Home				
4. Value of Crops Fed to Livestock During the Current Crop Year				
5. Capital Assets Sold				
6. Total Income (Add Lines 1-5)				
EXPENSES				
7. Beginning Inventory				
8. Cash Production Expenses				
9. Non-Cash Production Expenses				
10. Cash Expenses for the use of Buildings, Equipment, Machinery, etc.				
11. Non-Cash Expenses for Use of Buildings, Equipment, Machinery, etc.				
12. Capital Expense				
13. Total Expense (Add Lines 7-12)				
14. Return to Labor, Capital and Management (Line 6 minus Line 13)				
15. Applicant's Share				

(Continued on Page 14)

Entrepreneurship in FFA Award Programs

(Continued from Page 15)

Proficiency Award and American Farmer Degree applications have been programmed for use on the Apple II and Radio Shack TRS-80 Micro-computers. These programs will be offered for sale through the National FFA Supply Service.

FFA award programs are not provided just to select winners. They are provided to enhance an instructional program. Students cannot learn to be entrepreneurs only through their classroom instruction. They also need to be provided the opportunity to put into practice what they learn in the classroom to be successful entrepreneurs. It is only through this hands-on experience that they will learn to organize, manage and assume the risks of a business or enterprise.

THEME

Using Records in Decision Making

Developing a sense of entrepreneurship in a high school vocational agriculture student in today's competitive agriculture is not as simple as it may have been in the past. If conducted and developed through a thoughtful plan, supervised occupational experience programs can be useful tools in entrepreneurship development.

First, the teacher must be sold on the SOEP idea and require students to conduct a well-planned program. The SOEP plans should include future goals for expansion and involvement, so the student is not just conducting a project, but rather establishing an entrepreneurship business.

Revising Record Books

One of the goals of the Nebraska Vocational Agriculture Association this past year has been to develop and strengthen SOEP's across the state. As a part of this goal, the committee on SOEP and Record Books conducted a three day workshop for district representatives and selected members to review and revise the Nebraska Vocational Agriculture Record Book. The committee's work was coordinated by the University of Nebraska Agricultural Education staff. Agricultural education students at the University of Nebraska will be working to develop a sample problem and a record keeping handbook to accompany the newly revised record book.



BY DANIEL A. FETTERS
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Included in the changes made in the Nebraska Record Book are an income-tax-format oriented cash expenditures general ledger, a monthly livestock inventory, crops and livestock efficiency factors pages, crop field history pages, a loan transactions record, and an accounts payable and receivable page.

Records have many uses; but, as teachers of vocational agriculture, we must not lose sight of the real purpose of record keeping. Records are not kept solely to meet requirements for State Farmer or American Farmer degrees. The real purpose of records should be for decision making purposes.

If you want to know the kinds of records needed in farming today, ask some struggling, beginning young



The 70 cow grade A producing herd is one-fourth registered and three-fourths VIP grade and averages 5600 lbs. of milk every two days.



The ration consists of corn silage, green chop alfalfa or alfalfa hay, and commercial feed. Six years ago DHIA tests showed a low income over feed cost of \$1.69 so urea samples were taken from the cows and from the feed. A high urea content was found. An adjustment was made in the commercial feed ration. Now the returns over feed cost is around \$1.79.

farmers. They will probably tell you their records are primarily used for presentation to creditors rather than for tax purposes. The farm creditor will ask for past production records, projected cash flows, a statement of financial position or net worth statement, and a profit and loss statement. All of these records can help show the ability to repay, a major consideration in making a farm loan.

Teaching Record Keeping

Before fourteen year old students can use records to make business decisions, they must learn basic record keeping and use this knowledge to keep accounts on their first SOEP. Some basic parts of their record book need to be an agreement, a budget, goals and production efficiency factors, enterprise plans, income and expense records, an inventory, net worth statement, and the enterprise financial summary or profit and loss statement.

After the student has these records in hand and they are accurate to an acceptable degree, then records can be used for their real purpose. One of these purposes may be to satisfy tax laws or other legal requirements. To benefit the student, however, record use should not stop here. If records are not used for decision making, then students cannot benefit from the management principles that you have taught them.

As students get more involved and start to expand their SOEP's, more extensive records may be needed. These may include a loan transaction record, or accounts payable record, and possibly an accounts receivable record. In addition to an inventory record, they may need a depreciation schedule. Other examples may be a breeding record, weight record and yield record.

An Example

Let me cite an example of how records can help student's entrepreneurship endeavor. Vanessa enrolled in vocational agriculture as a ninth grader, and her SOEP was two dairy cows. Her parents had helped her acquire the cows for a 4-H program, and in vocational agriculture she started expanding by buying and raising additional heifers.

After her first year of keeping records, she and her parents decided they would like additional information on the production of their sixty cow dairy herd. They started



Vanessa and her husband, Mike, display her collection of dairy show winnings. Vanessa has shown dairy animals for the last 10 years in 4-H and in FFA the last six years. She has had six grand champions and eight reserve champions with two animals declared best of show.

keeping DHIA records. The herd was a combination of grade Holsteins and purebred Holsteins. From the records, Vanessa discovered that her registered cows were producing above the herd average, so this encouraged her to develop partial budgets to compare expected returns from registered versus grade dairy cows for the herd.

Her goals for the following year were based on the production averages of the registered cows.

This is a section of her dairy page in her record book the next year:

Jan. 4	The DHIA tests showed:		
	Beauty	40.5 lbs. milk	3.5% fat
	Cupid	32.5 lbs. milk	3.9% fat
	Mary	28.5 lbs. milk	4.3% fat
	Nola	21.0 lbs. milk	4.4% fat
	Sherbert	36.0 lbs. milk	4.4% fat
	Tamara	61.0 lbs. milk	3.7% fat
	T.J.	45.0 lbs. milk	3.4% fat
Jan. 19	Vet came to pregnancy test: Cupid pregnant and Tamara open.		
Jan. 24	Bred Sherbert to bull #H1244 Staight-Pine-Com-Pete-Et		
Jan. 30	Bred E.J. to bull #H568 Leprechaun Victorian		
Feb. 3	The DHIA tests showed:		
	Beauty	45.0 lbs. milk	3.5% fat
	Cupid	27.5 lbs. milk	3.8% fat
	Mary	30.5 lbs. milk	4.0% fat
	Sherbert	36.6 lbs. milk	4.3% fat
	Tamara	50.0 lbs. milk	3.9% fat
	T.J.	44.0 lbs. milk	3.5% fat
	Nola was sent to Omaha market because of low production, 21.0 lbs. milk. Registered herd was 37.8 lbs. milk.		

By her senior year, Vanessa had raised her registered herd average to 43.61 pounds by further culling, although she had not yet reached her goal of 45 pounds of milk. She has also been using her records to feed more efficiently by utilizing cheaper feeds and altering rations. Her feed cost per pound of milk produced was \$.044.

In January of her freshman year, her net worth statement showed an inventory value of \$4,000. and a net

(Continued on Page 18)



Vanessa started using the Corrective Breeding Home Study Guide from the Holstein Friesian Association, called mapping, two years ago. This system is used to select sires for AI breeding to improve weaknesses in the herd and to select for repeatability in milk production.

Using Records In Decision Making

(Continued from Page 17)

worth of \$4,500. According to her 1982 balance sheet or net worth statement, Vanessa owns eight producing cows, five heifers two years or under, two commercial beef cows, four commercial beef heifers and one beef steer, for an inventory value of \$17,616.80. Her total assets are \$35,403.80. She has liabilities of \$5,225.00, for a net worth of \$30,178.80. A change from one year ago is an increase of \$3,047.80. Her cash flow from the producing cows has enabled her to expand into beef cattle production without borrowing money.

Vanessa is now married and has worked out a partnership with her parents on the dairy enterprise. She still helps with the milking and herd management, including the DHIA records and cow registration.

Her husband was a hog producer until two years ago when hog prices dropped to \$34/cwt and enterprise analysis showed a loss. They are using Vanessa's records on beef

production to decide what enterprise may be more profitable to produce. Her profit and loss statement will help in this decision. The cash flow analysis record for the partnership in dairy will also be adjusted to include her new husband's enterprises of corn for silage and alfalfa, which was being fed to the dairy enterprise.

Vanessa, now 19, earned the State Farmer Degree one year after graduation. She and her husband have a good start into their life as entrepreneurs on the farm.

As students get into computer usage and as software becomes available, we will see more computer analysis of farm records. We will also see programs like Visa-Calc and other window programs to solve "what if" types of question for future entrepreneurs.

Entrepreneurship in SOEP is still very much alive and present. Students can make a beginning in farming and other agriculturally related business. Those who are succeeding best are those who use records efficiently. They are making sound management decisions based upon their business records.

ARTICLE

Student Dissatisfaction with SOE Programs

Behavioral psychologists suggest that satisfaction associated with an experience has a direct influence upon the enthusiasm and frequency with which that or similar experiences are undertaken. In working with students in an educational program it is often desirable that the student experience some degree of satisfaction, particularly if the behavior is expected to be repeated. It is generally agreed that students can learn from negative or unsatisfying experiences, the problem is to get them to repeat such behavior. Thus, if a vocational agriculture student is dissatisfied with membership in the local FFA chapter, it is much more difficult to convince that student to continue as a member in subsequent years. The same thing is true with their SOE program or their total vocational agriculture experience.

Recent studies on SOE programs conducted in Colorado, Nevada and Arizona all found large percentages of students who indicated that they would prefer a different type of supervised experience program from the ones in which they were involved. While this indication of dissatisfaction does not necessarily mean they were unhappy with their existing SOE pro-



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grams, it does indicate a desire to do something more or different from current practice.

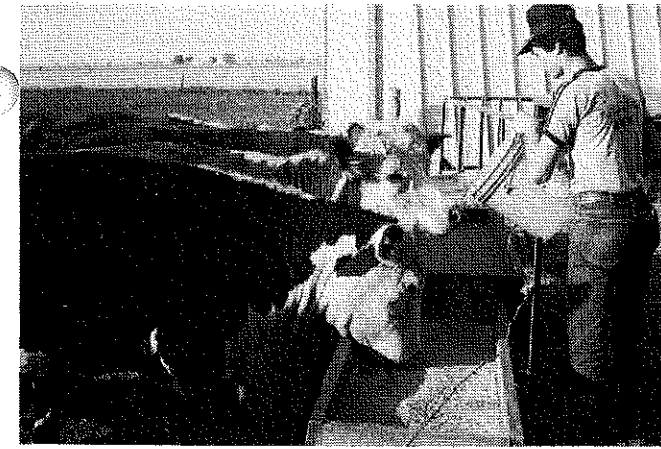
Attempts to increase student participation in and quality of SOE programs might be well served by determining why a majority of students conducting SOE programs in Arizona (55%) and Colorado (61%) desired a different SOE program. These findings raise questions such as: 1) Are younger students more satisfied than older students? 2) Are students with traditional types of SOE programs less desirous of a change than those with non traditional types? 3) What is the relationship between scope of SOE programs and student satisfaction? 4) Do the expectations held by students of SOE programs influence their satisfaction? 5) How does FFA membership

and/or a desire for an agricultural career influence student satisfaction? 6) How does teacher supervision influence student satisfaction? Answers to these questions could help explain and reduce the seeming dissatisfaction students have for SOE programs. This in turn might help teachers significantly increase student participation in SOE programs.

The Problem

In 1979, a group of agricultural educators in the western region became concerned with the perceived utilization of supervised occupational experience in vocational agriculture. A small planning committee working under the leadership of Dr. Orville Thompson and with a small grant from the Farm Foundation met at the University of California at Davis and outlined a multiphase research study. The original plan was for this to become a regionally-funded project through the agricultural experiment station designed to access the status of SOE programs and to identify factors associated with successful SOE programs.

While the study was never funded as



Many students wish to increase the scope of their SOE Programs. (Photographs courtesy of Dave Wilson, Vocational Agriculture Instructor, St. Joseph, Illinois 61873.)



a regional project, several states have undertaken the study on their own. Studies have been conducted in New Mexico, Colorado, Nevada, Utah, California and Arizona. Fortunately, the researchers in all six states have utilized similar research procedures and instruments. Thus, the results from the various states can be compared and contrasted to make some generalizations about SOE programs.

Two important findings reported to date include: 1) the relatively high, but variable percentage of student participation in SOE programs (see Table 1 and 2) the high percentage of students conducting SOE programs who would prefer a different type of SOE program.

TABLE 1 — SOE Program Participation and Satisfaction as Reported by Various States.

State	% of Students Participating in SOE Programs	% of Students Who Would Prefer a Different Type SOE Program
Arizona	80.6	55.0
California	64.0	N.A.
Colorado	95.4	61.0
New Mexico	81.4	N.A.
Nevada	71.5	41.7
Utah	80.3	N.A.

Findings

Attempting to explain this seeming dissatisfaction with SOE programs in Arizona, the author spent considerable time analyzing existing data provided by vocational agriculture students in the Fall of 1982. The results revealed that in Arizona the percentage of students desiring a different type of SOE program did not vary with years in vocational agriculture. The percentages of students desiring a change were 54.4 percent for those who had

completed one year followed by 58.9 percent and 52 percent for those who had completed two and three years of vocational agriculture.

When FFA membership was compared to the percentage of students dissatisfied with their SOE program, it was found that 56 percent of the FFA members desired a different SOE program. Among non FFA members, which was a very small group (2.5 percent), 45.5 percent indicated a desire for a different SOE program.

Somewhat similar results were found when the percentages were broken down based upon an expressed desire for an agricultural career. A total of 57.3 percent of those students desiring an agricultural career answered affirmative while 50 percent of the students not planning an agricultural career would like a different type of SOE program. These two results suggest that an affirmative response might not be an expression of unhappiness, but rather a desire to have a larger, more challenging type of SOE program. Analysis of the responses broken down by SOE program indexes provides additional evidence that this might be an accurate hypothesis.

The indexes which were used to quantify the scope of the experience programs were summarized for both the group of students desiring a different SOE and the group which did not desire a different SOE program. Indexes were separately calculated for students having placement experiences and those with ownership type SOE programs. In both cases, the mean index values were lower for the students answering in the affirmative; thus, indicating that students desiring a dif-

ferent type of SOE program tended to have programs of smaller scope than students content with their existing programs. While this was not a statistically significant difference, it was consistent for each type of SOE program analyzed. The logical conclusion is that many, if not most, of the students expressing a desire for another type of SOE are expressing a desire for a larger more challenging program.

Students were asked to identify the personal reasons that influenced them to conduct an SOE program. The list of reasons from which the students were to select not more than three included: 1) desire to make money, 2) gain occupation experience, 3) receive FFA awards/degrees, 4) to improve their grades in vocational agriculture and 5) because it is required. Perhaps surprising to some observers is the fact that the largest percentage of students (74.1 percent) identified the desire to gain occupational experience as one of the reasons for conducting SOE program. A total of 66.7 percent identified the desire to earn money and 63.3 percent said that FFA degrees and awards were a motivational factor influencing them to participate in the SOE program. The only significant correlation between the students selecting the above three factors and an expression of dissatisfaction was with the desire to earn money. Students who identified, as one of the reasons for conducting an SOE program, the desire to earn money were also likely to express dissatisfaction with their existing SOE program.

The final factor investigated was the possible relationship between the amount of teacher supervision as
(Continued on Page 20)

Student Dissatisfaction With SOE Programs

(Continued from Page 19)

measured by number of student reported teacher visits and the students' dissatisfaction with the SOE program. Students reported the number of annual teacher visits using a scale of: none, one, two, three, four or more. The results showed a statistically significant difference in the mean number of teacher visits between the satisfied and the unsatisfied students. The satisfied students reported the greater number of visits. This may be a simple coincident difference growing out of the fact that the satisfied students have SOE program of larger scope and thus receive more supervision. On the other hand, the fact that the teacher is interested as indicated by supervisor visits may increase student satisfaction with their SOE programs.

Conclusion

The reported findings suggest that a large percentage of vocational agriculture students conducting SOE programs are not satisfied with their existing experience. Evidence suggests this dissatisfaction is not of a negative

nature, but rather an expression of a desire to do more.

It is obvious that additional research needs to be undertaken to quantify in a more definitive nature the source of the expressed dissatisfaction. Such findings may suggest ways in which occupational experience programs can be improved and student satisfaction enhanced.

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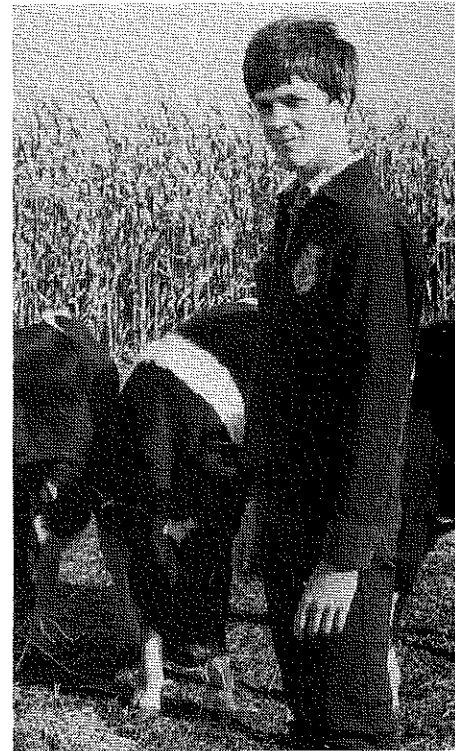
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Students desire to receive FFA awards/degrees through SOE programs. (Photograph courtesy of Dave Wilson.)



An inventory by beginning students will identify many opportunities and learning resources. (Photographs courtesy of (l) Lindsey Keene, Southeast Lauderdale Attendance Center, Meridian, MS 39301; and (r) Marvin Flatt, Westview High School, Martin, TN 38237.)



teachers can help identify potential SOE projects for each student; 4) students are made aware of agri-related learning opportunities; 5) students are assuming an active role in their educational program; 6) teachers can use this information in applying everyday in-

struction to the needs, interests, and backgrounds of the students; 7) the Inventory is an excellent way to start off the first supervisory visit to a student where the student, parents, and teacher can discuss points on the Inventory which can lead into future projects and

a quality educational experience.

Agricultural educators have always maintained that instruction starts where the student is. What better way to do this than through a Personal Resource Inventory completed by each student.

ARTICLE

Start Your Students Off With A Personal Resource Inventory

The challenge of stimulating a beginning student's interest in starting a supervised occupational experience project has always been an annual task for the agricultural teacher. Students will continually claim they do not have opportunities for a project and this feeling begins to build up a negative attitude toward this part of our program early in the school year. A positive approach to use in starting students to think about different resources available to them for possible out-of-school projects is to ask each student to complete a Personal Resource Inventory form as shown in Figure 1.

The teacher should distribute this Inventory during a class period early in the school year and explain unfamiliar



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terms; supervised occupational experience program (SOEP), improvement projects and give examples of how the form can be completed. It is important that the teacher read the directions to the class for completing the form and that each student should seek the help of parents or guardians. Furthermore, teachers can point out that the more they know about the student, the better they can plan for future instructional topics.

This learning activity will result in several positive outcomes. Some of the more obvious are: 1) students will be made aware of project opportunities available to them at home or near their homes; 2) parents will be actively involved in their child's education; 3)

PERSONAL RESOURCE INVENTORY

Name _____ Date _____

This inventory is for the benefit of the student, parents and instructors to help identify possible resources that may be used in developing the student's Supervised Occupational Experience Program. Both you and your parents or guardians should be involved in completing the form to insure accurate results. Information provided will not be released to others and will only be used to help plan a sound educational program for the student.

I. RESOURCE INVENTORY - Check those items below that are available at home and those available through relatives or neighbors. For each item you check, indicate the size or number available for your use. List any other items available in the blank spaces for each section.

	AVAILABLE AT HOME	FROM OTHERS	SIZE OR QUANTITY
A. LAND AND CROPS			
1. Lawn			
2. Flower garden			
3. Vegetable garden			
4. Fruit trees			
5. Grape vines			
6. Strawberry plants			
7. Other berry vines (specify)			
8. Forest land			
9. Pasture			
10. Hay land			
11. Crop land			
12. Farm pond			
13.			
14.			
15.			
B. ANIMALS			
1. Beef cattle or calves			
2. Dairy cattle or calves			
3. Chickens			
4. Turkeys			
5. Sheep			
6. Hogs			
7. Horses or ponies			
8. Rabbits			
9. Small animals (specify)			
10. Dogs			
11. Other animals (specify)			
12. Bees			
13.			
C. EQUIPMENT			
1. Garden hand tools (hoe, rake, etc.)			
2. Hand pump sprayer			
3. Tiller			
4. Lawn mower			
5. Chainsaw			
6. Hand woodworking tools (hammer, saw, etc.)			
7. Power woodworking tools (circular saw, etc.)			
8. Mechanics tools (wrenches, pliers, etc.)			
9. Truck			
10. Tractor			
11.			

Figure 1

D. FACILITIES	AVAILABLE AT HOME	FROM OTHERS	SIZE OR QUANTITY
1. Cattle barn			
2. Storage building			
3. Chicken house			
4. Grain storage bin			
5. Greenhouse			
6. Garage			
7. Home shop			
8. Stable			
9.			
10.			

E. FINANCES AVAILABLE FOR STUDENT SOEP (optional)	
1. Amount in student's savings account	\$ _____
2. Amount in student's checking account	_____
3. Cash on hand (student's money)	_____
4. Financing available from parents	_____
5. Financing available from others	_____
TOTAL FINANCING AVAILABLE	
6. Major debts owed by student	_____

II. INTEREST AND EXPERIENCE INVENTORY - Check those areas below that interest you and those areas in which you have had previous experience.

AREA OF AGRICULTURE	HAVE AN INTEREST	HAVE EXPERIENCE
1. Vegetable garden		
2. Livestock		
3. Small animals		
4. Poultry		
5. Crop farming		
6. Forestry		
7. Ag. Mechanics		
8. Ornamental Horticulture		
9. Ag. Business (Specify an area if appropriate)		
10. Seafood		
11.		
12.		

List your top three career choices in order from first to third:
1. _____ 2. _____ 3. _____

III. TIME INVENTORY - Estimate the time you will have available for SOE work:
During the school year on weekdays _____ hrs./week
During the school year on weekends _____ hrs./weekend
During summer vacation (all week) _____ hrs./week

IV. IMPROVEMENT PROJECT INVENTORY - Check any of the following items around your home that need fixing, painting or improving.

CHECK	CHECK
House exterior paint	Plumbing in house
Household wiring	Lawn mower
Wiring in outbuildings	Outbuilding paint
Lawn	Overgrown land
Shrubbery	Equipment
Fences	Clothesline
Flower beds	Driveway
Build new shed	Shade trees
Tear down old shed	Rubbish piles
Repair old building	
Nailbox	

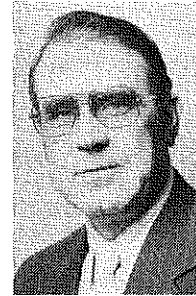
Improving Projects Through Exhibition

Several years ago in Oklahoma many teachers felt a need for their students to exhibit their mechanics projects. As a result of this need, the management of the three State Fairs in Oklahoma were contacted and premiums were established for an agricultural mechanics exhibit at each of the fairs. Guidelines for entries and a scorecard for judging were developed. As with any program, changes have been made to improve areas of weakness. Because of their success, agricultural mechanics exhibits have been established at most of the County Fairs throughout the State.

Earning Recognition

Through the years, the showing has had tremendous effect on the type and quality of livestock being produced. Most breeders select and breed the type of animals that are being accepted in the showing. Moreover, when it comes to feeding and fitting those animals, they adjust their feeding program and fit the animal in such a way as to have the desired appeal to the judge. If the showing has such an impact on improving the quality of livestock of FFA members, why not let it improve the work students do in a vocational agriculture mechanics laboratory?

There has always been a certain amount of glamour associated with livestock shows, which is probably one



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of the main reasons for their popularity in the FFA Program of many states. Students need recognition for a job well done and that recognition certainly comes when they perform well in the shows. They need to develop a sense of pride and this too can be done as they work with and groom their livestock to be representable in the shows. We can look at all the worthy attributes and see most of them can also apply to the student who exhibits projects built in the vocational agriculture mechanics laboratory.

Judging Projects

The general guidelines specify that all projects exhibited must have been constructed by FFA members in the vocational agriculture laboratory within the previous two years. To add uniformity to the exhibit, exhibitor signs were developed and are provided by the State Vocational Agriculture

Office for the exhibitor to list the bill of materials and cost of the project.

A score card was developed to provide guidelines for judges to use in placing the exhibits.

FARM SHOP EXHIBIT SCORE CARD

	Possible Points
1. Workmanship:	
A. General appearance (neatness and finish)	10
B. Quality of workmanship	15
C. Number of skills	15
2. Structure and Design:	
A. Strength and durability	15
B. Originality	5
C. Safety features	10
3. Practicability:	
A. Labor saving on the farm	10
B. Convenience and usefulness	10
4. Material:	
A. Economic choice of material	10
TOTAL POINTS	100

The score card places the greatest emphasis on workmanship in judging exhibits. The importance of quality must always be emphasized in project construction.

The exhibit is divided into seven different classes, based primarily on the use of the project. The classes are: livestock and horse trailers, other trailers and wagons, truckbeds/racks, livestock production projects, farm-

stead/crop projects, shop improvement and hobby/recreation. To encourage an FFA Chapter to exhibit several projects, five cash awards are given the chapter accumulating the most points in the competition.

Planning Projects

In many vocational agriculture departments, students begin planning early to enter the agriculture mechanics exhibit at the fairs. As a part of their vocational agriculture mechanics course, they are usually required to complete a project.

They begin to look over plans available in their vo-ag department, at projects they have seen, or perhaps some item of equipment they need around home or on their farm. After deciding what they are going to build, they develop their plans, get the materials together, and then are ready to begin construction.

From that point on, from the first piece of metal cut to the final paint job, the student keeps in mind the quality and workmanship must be first class because his/her name, along with the name of the chapter, will be on the project for many to see as they visit the State Fair.

To place well in the competition, a project must first of all be of high quality and workmanship, and functional in its design. It is good to see a project on display that is attractive and indicates a student's pride in workmanship, but the real test comes when that piece of equipment is put into service.

We like to see projects that were once shown at the fair being used for several years after being a winner of an award. It is somewhat like a heifer that

wins breed champion at the State Fair, the real test is how many calves she produces during her lifetime and how well they perform.

Quality Incentives

As we think of all the glamour and fanfare associated with livestock shows, we have a tendency to feel exhibiting laboratory projects can never compete. This may be true to some degree, however, it is amazing to watch the students bring in their entries. Students entering their projects take as much pride in setting up and "grooming" them as a student getting ready to show a steer at the fair. If the project got scratched or dirty in transit to the fair, you may see them washing or touching up the scratches with quick drying spray paint. Students feel it is not only their project on display throughout the duration of the fair, but they and their chapter also, and they are anxious to make a favorable impression.

Probably the strongest influence upon a student to do quality work comes from the teacher. Very few students will perform at a higher level than is expected by the teacher. The teacher must instruct, motivate, encourage and evaluate students as they build their projects. If the teacher demands high quality workmanship, students will produce a quality project.

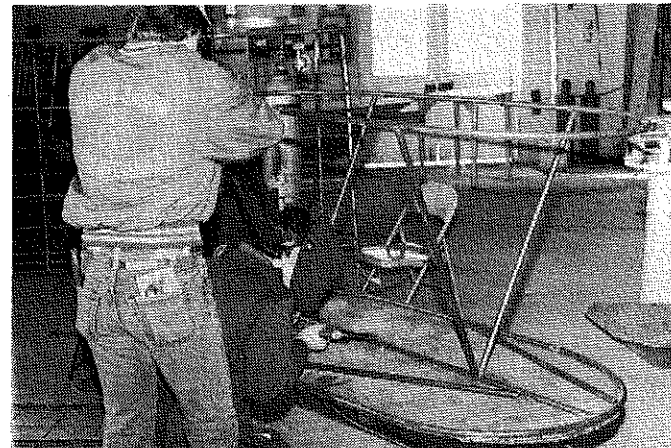
We do not advocate that our vocational agriculture laboratories become manufacturing plants. We must keep in mind our primary objective is to teach students the skills necessary to become employable. The building of projects, however, becomes an avenue for a student to take the many skills learned in the instructional phase of the program and apply them to a real life situation.

This exhibitor card was developed to allow students a uniform system to display the bill of materials used in the projects. Also, it makes for a more attractive display of the overall exhibit.

Having served as Superintendent of the Agricultural Mechanics Exhibit at all three of the State Fairs in Oklahoma for the past eleven years, it has been my privilege to observe many parents, grandparents and patrons of the communities where the chapters are located, say proudly, "Here are some projects our kids built". Students will be more quality conscious when they know their work will be evaluated by hundreds of "judges". The most frequent question heard from fairgoers is, "Are these projects for sale?" The quality shown in the projects is admired by all.



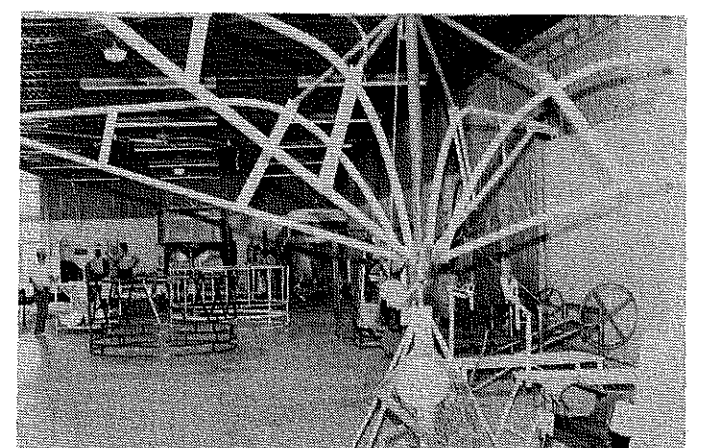
Students are permitted to show practically any project they built in the shop, from the large goose-neck trailer to the smallest foot scraper.



Students develop many different project designs that are very functional.



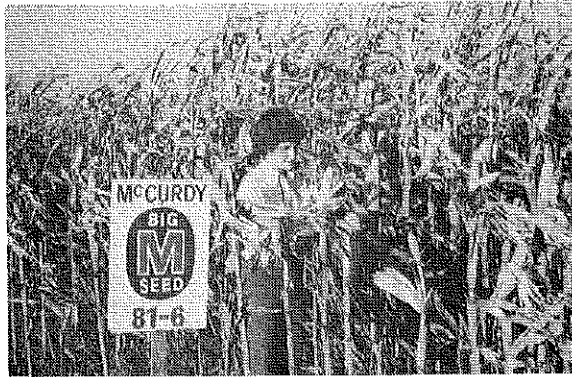
Students take a great deal of pride in construction of projects they plan to exhibit.



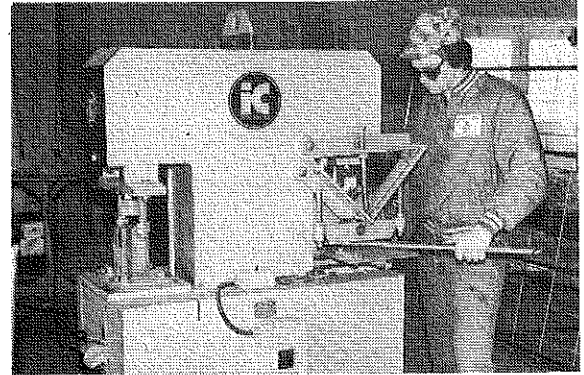
Well-made, eye appealing projects make an attractive display at the Fair.

Stories in Pictures

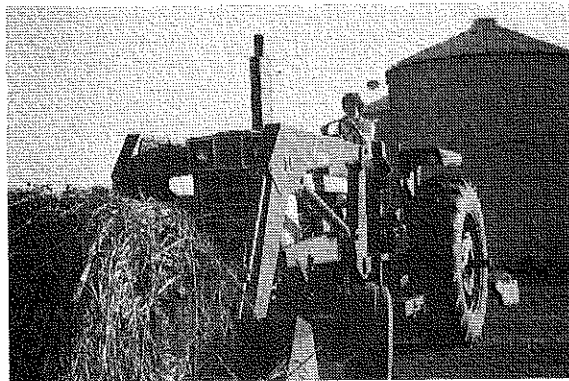
Entrepreneurs need agriculture knowledge and skill to succeed



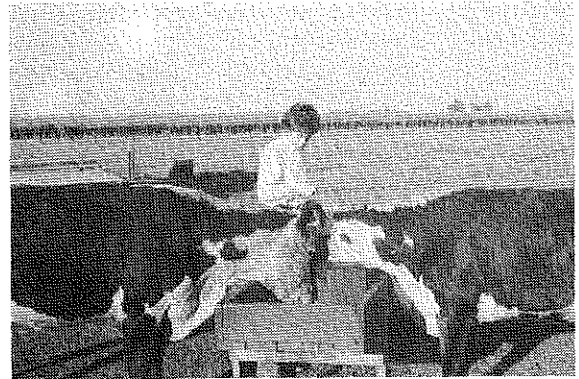
Agronomy



Mechanical Construction



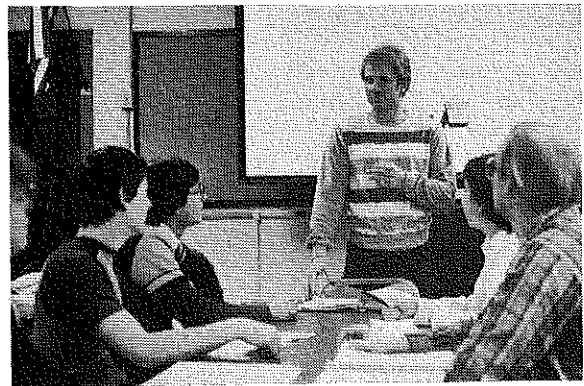
Mechanical Operation



Livestock



Business



Leadership

(Photographs courtesy of Dave Wilson, Vern Luft and Verlin Hart.)