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SAE Programs — A New Look

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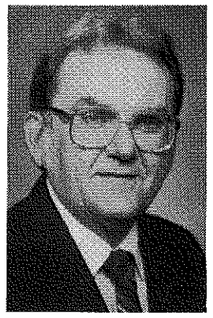
Foundations for Excellence in SAE

Moving Beyond Practice to Learning



By GARY LESKE
Dr. Leske is professor of agricultural education at the University of Minnesota, St. Paul.

The call for excellence in America's schools has been loud and continous in recent years. The demand for rigorous college preparatory courses has reached the point of dulling the reality that secondary education's purpose is to help all students. While the back to the basics chants have caused many of us to wonder what the purpose of education is thought to be, few of us would argue that excellence, rigor or better prepared students are not important targets for improvement. We can improve our product — students. The challenge in developing students is multifaceted and great, but we have an educational process that will help us meet the challenge — SAE.

The challenge of agricultural educators is to use students' Supervised Agricultural Experience programs as effectively as possible. Dewey made the point very clearly that experience does not directly equate with learning. We need to move beyond habit formation and simple transfer of what was presented in the classroom to a truly experiential learning process. The point is not that what we have been doing is not useful, but that it is not sufficiently rigorous to meet the needs of many of our students in their future workplace. If we listen to what employers say they want, we need to produce students who know how to learn, think, and solve problems. And yes, we can improve our process by rigorous application of SAE basics.

A new look at the foundations of SAE is in order. We are functioning primarily on the basis of common sense — personal theory derived from personal experience and approved practice/process guidelines. We need to practice what we preach. Students should take the validated knowledge (the theory) available in both our classes and the literature and test current practice through what is being done in the real world. Simiarly, as agricultural educators, we need to actively take the validated theories (the basics) that support SAE and test our processes and personal theories.

Three categories of theory provide an excellent framework for the examination of our professional practice relative to SAE: experiential learning, career development, and work adjustment. For illustration purposes, I will utilize experiential education theory.

Kolb's experiential learning model contains four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. To ensure that one has an experiential learning-based program, it must be demonstrated that students complete this cycle regularly. The concrete, personally involving activity is not enough. Doing is not learning.

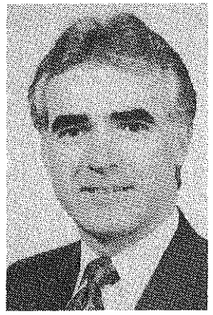
Reflection is the critical process which needs most attention — a new look. Not only do experts indicate that the missing link in experiential learning identified by most people is reflection, students support the need. Research clearly indicates that students in cooperative/community-based programs who participated in structured reflection feel that they have learned more from their experiences than those who did not have structured reflection built into their programs.

Reflection involves analysis of experience and making connections between one's current knowledge base and the implications of the immediate or recent past experience relative to this knowledge base. If one's knowledge base is changed as a result of this reflection, learning has occurred.

. . . reflection is the key ingredient in the development of self-directed learners.

While some argue that the reflection process does not need to be learned, few would argue that most students are reflective and critically examine their new experiences. In short, experiential learning theory suggests that we need to ensure that our process structures student reflection. A colleague speaks of the SAE associated class as the "control class" because it is a critical part of the process of facilitating students' reflection on their SAE activities and ensuring that this is experiential education, not just a job, time out of school, or "credit for what I regularly do." →

A New Model for Agricultural Education and SAE



By Dr. R. KIRBY BARRICK

Dr. Barrick is professor and head of the Department of Agricultural Education at The Ohio State University, Columbus.

Agricultural education in the public schools has a rich heritage of developing students' personal skills, as well as providing abilities needed in agricultural employment. To serve the needs of students, agriculture teachers have utilized a combination of classroom and laboratory instruction, supervised experience, and FFA activities.

Over the years, agriculture programs have evolved to better serve the needs of students. Recent changes in the agricultural industry, student population, society, education system, and the workplace have necessitated expanding the scope of public school agricultural education to meet the needs of today's students. To reflect this expanded scope, the three circle model (classroom, SOE, FFA) was re-examined to ensure that the new concepts of SAE were aligned with theory and practice in agriculture programs across the nation.

The new model (see page 5) was developed by a seven-member writing team appointed by the National Task Force on Supervised Agricultural Experience and included agriculture teachers, agriculture teacher educators, and a graduate student in agricultural education. Developing the model was a necessary step in describing and illustrating the role of SAE in agricultural education.

Agricultural education takes place within the context of the school and the community and is comprised of four components: a) classroom and laboratory instruction, b) application, c) employment and/or additional education, and d) career.

Classroom and laboratory instruction focuses on technical agriculture, leadership, and personal development. Supervised experience, improvement activities, and FFA provide experiential learning opportunities, reinforce instruction, motivate students, and provide a means of identifying problems on which to base instruction. Incentives such as contests, degrees, and awards are not the driving force on which FFA and supervised experience activities are based, but instead serve as reinforcement and motivational tools by providing recognition to students for exemplary performance.

The model shows that agricultural education does not end with the completion of secondary education; employment and/or additional education, and eventually a career, are the intended outcomes of an agriculture program. Although it is intended that employment, education, and career would be in agriculture, the agriculture program is viewed as valuable in preparing people for productive lives in many career areas, thereby indicating the value of education "about" as well as "in" agriculture. →

Foundations for Excellence . . .

(continued from page 3)

Reflection is more than record keeping, a log of activity, or diary. It is analysis and idea generation which leads to conceptualizing theories. If I do X, I expect Y to happen. After application of personal theory X in active experimentation, one has new concrete experience for reflection.

How do we facilitate reflection? The methods are not new. Ask students to identify problems of practice in their SAEs and propose solutions. Have students specifiy critical incidents in their SAEs and write analyses or present their analyses to the class. The key point is that we need to give much more attentiion to the reflection process. It slips through the cracks of the busy day, but reflection is the key ingredient in the development of self-directed learners.

If the goal of SAE programs is to develop students who value and can use the experiential learning process without support, or stated another way, if we want to develop individuals who can learn independently on the job, we need only take a new look at the theoretical foundations of SAE. These theories tell us what is basic in ensuring SAE success. Theory application is what identifies us as professionals. ■

Basis for the Model

The agricultural education program model reflects the needed evolution and revisions advocated by Krueger and Mundt (1991) and the National Research Council Committee on Agricultural Education in Secondary Schools (1988). The basis for the model comes from changes in the agricultural industry, student population, society, education system, and workplace.

Changes in the Agricultural Industry

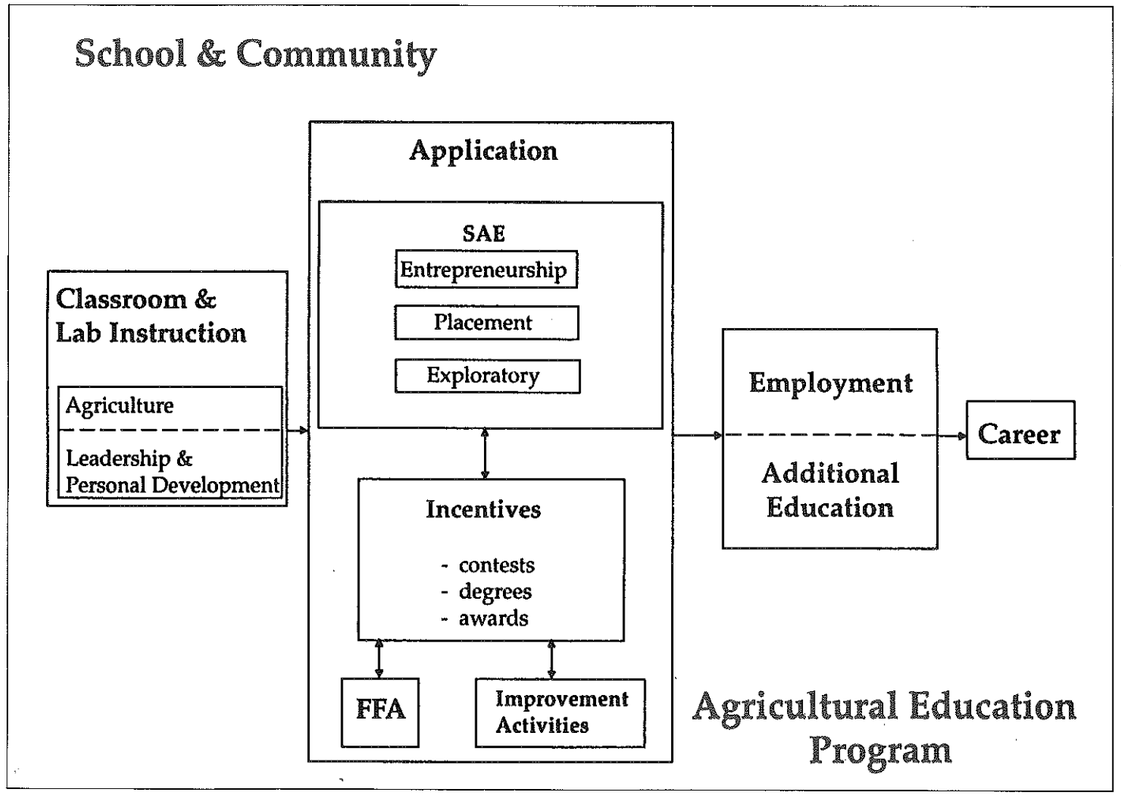
Technoiogical developments require that agriculture programs are continuously updated to meet the needs of the modern agricultural industry. The National Research Council Committee on Agricultural Education in Secondary Schools (1988) stated that "change within agriculture is an ongoing process that will affect agricultural businesses and institutions. They must adapt to continue serving agriculture. The institution of vocational agriculture is no exception" (p. 3).

Changes in Student Population

Changes in student demographics dictate that the approach to agricultural education must change in order to ensure that all students receive meaningful instruction. One such change in demographics is the decline in the number of students with farm backgrounds. Another change in student demographics is the increase in the number of limited opportunity and special needs students enrolled in agriculture programs.

Changes in Society

Just as education must adjust for changing student demographics, it must adjust to a society in which norms and values have changed. An example of those changes is that only about 40% of children born today in the U.S. can expect to spend their childhood living with both parents (Grant Foundation, 1988). Since 1975, peole 18 years old and younger have been poorer than any other age group in the U.S. (Reed & Sautter, 1990). The U.S. has the highest rate of child poverty among the industrialized nations — nearly three times that of most other economically advanced nations. In addition, Reed and Sautter (1990) reported that from 1985 to 1988, the number of children born with drug exposure quadrupled, and that between 1981 and 1988 the number →



of abused or neglected children increased by 82%.

Changes in the Education System

The Secretary's Commission on Achieving Necessary Skills (SCANS) reported that the U.S. is "failing to develop the full academic abilities of most students and utterly failing the majority of poor, disadvantaged, and minority youngsters" (SCANS, 1991, p. vi). This reported decline in education is occurring at a time when most of the international competitors and trading partners of the U.S. are making efforts to improve education (U.S. Department of Education, 1991). The back to basics approach advocated in *A Nation at Risk* (1983) and subsequent publicatiions included stringent graduation requirements with an increase in the number of credits required in the "core academic" courses (language arts, mathematics, science, social studies, history). Despite the good intentions of increased rigor, the Grant Foundation (1988) pointed out that the purpose of education is to create whole persons, and that schools and colleges represent only one means of providing education for life. The foundation recommended that education should act on the understanding that much learning takes place beyond the school.

Changes in the Workplace

From discussions and meetings with business owners, public employers, unions, and employers, SCANS (1991) reported that the message was clear - good jobs will increasingly depend on the ability to put knowledge to work. According to SCANS, over one-half of all students leave school without the foundation required to find and hold a good job. SCANS (1991) emphasized the need for schools to prepare students for productive employment in future occupations.

SAE programs can lead to a career in agriculture and agribusiness, including management and ownership. (Photo courtesy of Jason Perkins, Fayette, Alabama.)

Components of the Agricultural Education Program Model

The agricultural education program model reflects the response of agricultural education to recent recommendations for education and to the needs of today's agriculture student as dictated by changes in the agricultural industry, student population, society, education system, and workplace.

The model illustrates the holistic approach of the agriculture program toward the development of individuals. This approach was reflected in the philosophical guides of agricultural education identified by Phipps (1980) and in the mission statement detailed in **The Strategic Plan for Agricultural Education** (National Summit on Agricultural Education, 1989).

The Classroom/Laboratory Instruction Component

Historically, agriculture teachers have used classroom and laboratory instruction to promote leadership skills, personal development, and technical competencies in order to prepare young people for employment in agriculture. These activities prepare young people for responsible citizenship and productive employment as advocated in the America 2000 plan. Development of leadership and personal qualities was also promoted by SCANS (1991) as part of the foundation necessary for productive employment in the future.

The Application Component

The application component of the model fits well into an education system which emphasizes applied learning, personal development, and work-relevant instruction. In the application component, students apply a portion of what they learn in the classroom and laboratory through supervised experience, improvement activities, and FFA.

Experiential learning through supervised experience and FFA has been a hallmark of agriculture programs. The Grant Foundation (1988) recommended that "experiential learning, i.e., learning by hands-on participation, by trying, making errors, → and gradually narrowing the margin between failure and success, should be at the heart of our educational perspective" (p. 3). Experiential learning also promotes development of several competencies identified by SCANS as needed in the future workplace.

The individualized instruction and wide range of activities provided in the application component allow students of varying ability levels, aspirations, and backgrounds to successfully participate in agriculture programs. Both the college-bound and the "forgotten half" receive instruction and participate in activities based on their particular interests and needs. Through supervised experience and FFA, instruction can be tailored to meet the needs of limited opportunity students, as well as those of virtually unlimited opportunity. Improvement activities, a part of each SAE, supplement SAE and FFA and help reinforce the affective part of career development.

The model shows that agricultural education does not end with the completion of secondary education; employment and/or additional education, and eventually a career, are the intended outcomes of an agriculture program.

The Employment/Additional Education and Career Components

The final two components of the agricultural education program model, "Employment/Additional Education" and "Career," indicate the commitment of agriculture programs to providing the technical competencies, lifelong learning, and personal qualities required of the future workforce. These two components illustrate that agricultural education provides benefits to students regardless of whether they enter the workforce directly or continue their education following high school.

The Employment/Additional Education and Career components indicate that the agricultural education profession recognizes, as did SCANS (1991) and the Grant Foundation (1988), that education is a lifelong process occurring both in the classroom and on the job. The profession recognizes that a career is more than one's occupation, and that all components of the agriculture program are aimed at providing individuals the knowledge and qualities needed for a successful career in any occupational area.

Summary

How will the model affect programs, students and teachers? That answer cannot be given nationally. Instead, the National SAE Task Force and SAE Writing Team provided a model for direction — not "do as you please" but rather parameters within which states and local schools can work. For some, the model and the new approach to SAE will save agriculture programs that have been threatened due to perceived obsolescence. For others, the model and the materials that have been developed will provide a framework and justification for program change. Research in many states has shown repeatedly that SAE is and has been on the decline, while the concept is now being proposed as a way to save education. Perhaps the new model for agricultural education and SAE, when utilized by states and local schools, will help move programs into the 21st century.

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About The Cover

A seven-member writing team appointed by the National Task Force on Supervised Agricultural Experience developed a new model for agricultural education and SAE, including this new logo emphasizing the experiential component of agricultural education.

The New SAE

By
MATTHEW HUGHES
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What is SAE? How is SAE different from SOE? Why should we replace SOE with SAE? This article and others in this issue aim to answer questions about the "new" SAE and related student activities. Agricultural educators are given an overview of the SAE concept, the bases for SAE, the philosophical and pedgogical foundations of SAE, and some of the benefits of SAE programs. The new SAE is designed to provide opportunities for more students to experience agriculture, while acknowledging that the original farming program concept is still relevant and viable.

The SAE Concept

SAE is defined as . . . *the actual, planned application of concepts and principles learned in agricultural education. Students are supervised by agriculture teachers in cooperation with parents/guardians, employers, and other adults who assist them in development and achievement of their educational goals. The purpose is to help students develop skills and abilities leading toward a career. (Barrick, Arrington, Heffernan, Hughes, Moody, Ogline, & Whaley, 1992, p. 20).*

An SAE program includes "the specific learning experiences that are planned and conducted by an individual student that contributes to the development of agricultural and personal skills. A supervised agricultural experience program is a purposeful set of supervised agricultural experiences" (Barrick, et al., 1992, glossary).

Prior to the SAE concept, supervised experience in agriculture was known as supervised occupational experience (SOE), indicating the focus of students' programs - to provide occupational skills. Like SOE, SAE serves to bridge the gap between classroom instruction and the world of work. However, SAE goes beyond just occupational preparation by providing students with fundamental and transferable skills and knowledge which may or may not be related to a specific occupational area.

SAE is an expansion of the SOE concept. Its flexibility provides greater opportunities for all students to participate fully in agricultural education. SAE may be though of as "SOE plus."

As illustrated in the figure on the following page, there are three types of SAE programs. The program or programs selected by students depend upon the students' educational, career, and personal interests.

A major difference between SAE and SOE that is reflected in Figure 1 is that a series of improvement activities no longer constitutes a viable SAE program. Improvement activities are an integral part of agricultural education and each SAE program, but not a replacement for exploratory, placement, or entrepreneurship SAE programs.

SAE is an expansion of the SOE concept. SAE may be thought of as "SOE plus."

Following is a brief description of SAE programs. Other articles in this issue examine the programs in more detail.

Exploratory SAE programs "provide opportunities for the student to develop an awareness and further understanding of careers in agriculture or increase awareness and understanding of the food and fiber system" (Barrick et al., 1992, glossary). Exploratory SAE programs are most appropriate for, but not limited to, beginning agriculture students. The inclusion of exploratory activities as supervised agricultural experiences is an example of how SAE provides students opportunities beyond those available through SOE.

In **placement SAE programs,** "students work for others on a farm or other agricultural business, in school laboratories beyond regular class time, or in the community for pay or only for experience" (Barrick et al., 1992, glossary). Placement experiences may or may not be related to an occupational area. Placement SAE can include working in agricultural businesses or farming operations. Placement SAE can also include volunteering to participate in community service or agency activities that are agriculturally related.

In **entrepreneurship SAE programs,** "students have ownership of the materials and other required inputs and keep financial records to determine returns to investments. The student plans, implements, operates, and assumes financial risk in an agricultural business that includes production and distribution of goods and/or services" (Barrick et al., 1992, glossary). Entrepreneurship programs, like exploratory and placement programs, can take place in facilities owned by the student, other individuals, the school, or the community; however, the student has financial responsibility for all inputs in an entrepreneurship program. →

Improvement activities are an integral part of agricultural education and each SAE program, but not a replacement for exploratory, placement, or entrepreneurship SAE programs.

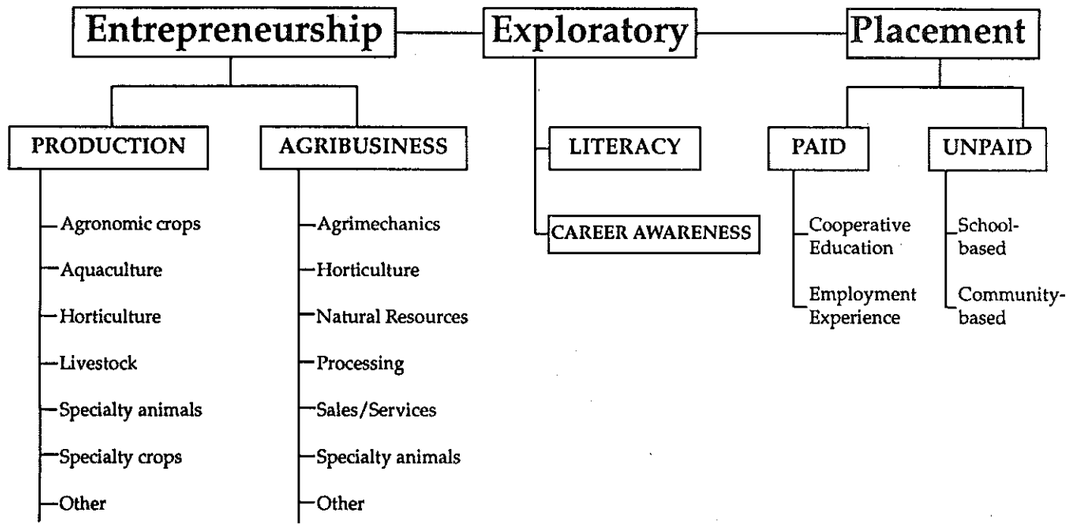
Bases of SAE

Technological advancements in the agricultural industry dictate that agriculture programs provide a means for students to receive state-of-the-art instruction. In addition to being technologically competent, future workers must possess high levels of problem solving abilities and interpersonal skills (Secretary's Commisson on Achieving Necessary Skills, 1991). Students can develop competencies and skills needed in the future work place through a variety of supervised experience activities.

Changing family structures and shifting student demographics are reflected in the enrollment of agriculture programs. Today, fewer students from the farm and more limited-opportunity students are enrolling in agricultural education. In the report, **Understanding Agriculture: New Directions for Education,** the changing enrollment in agricultural education and the need for all students to be agriculturally literature are recognized (National Research Council Committee on Agricultural Education in Secondary Schools, 1988). The SAE concept is sufficiently broad to promote agricultural literacy and to provide opportunities for all students to have meaningful supervised experience programs.

Many recent reports and recommendations for reforming the education system indicate the need for schools to provide students practical skills and a better understanding of the world of work. Much attention is also being focused on →

SUPERVISED AGRICULTURAL EXPERIENCE



schools promoting positive student involvement in the community. The SAE concept provides a variety of avenues for agriculture teachers to address students' needs brought about by the changing educational environment.

Philosophical and Pedagogical Foundations of SAE

Strong support for the SAE concept comes from agricultural education philosophy and principles of pedagogy. SAE is congruent with the philosophy expressed by Phipps (1980) in **Handbook on Agricultural Education in Public Schools** and by members of the profession in **The Strategic Plan for Agricultural Education** (National Summit on Agricultural Education, 1989).

According to Phipps (1980), agricultural education programs value: a) pragmatism, b) experiential learning, c) the individual student, d) vocational guidance and counseling, and e) community-oriented programs. The mission statement detailed in the strategic plan indicates that agricultural education supports: a) providing instruction in and about agriculture, b) developing the whole person, c) advocating free enterprise and entrepreneurship, d) being part of the total education system, and e) using a proven education process including formal instruction, experiential learning, and leadership and personal development.

Pedagogical support for experiential learning which characterizes the SAE concept is provided by John Dewey. According to Dewey (1938), "education, in order for it to accomplish its ends both for the individual learner and for society, must be based upon experience - which is always the actual life-experience of some individual" (p. 113). Pedagogical support also comes from recognized principles of learning (Hammonds, 1950; Newcomb, McCracken, Warmbrod, 1986):

1. Students learn what they practice; continued practice is usually necessary for retention of that learning.
2. Learning is maximized when students "inquire into" rather than receive "instruction in" subject matter.

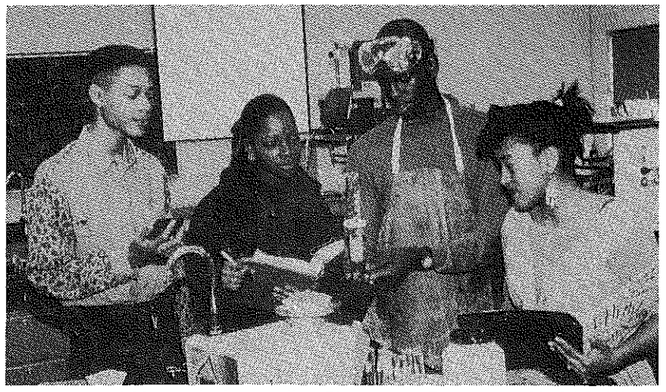
Benefits of SAE

The SAE concept is designed to provide numerous benefits to students, agriculture teachers, and others. SAE programs assist students in: a) making career and personal decisions, b) achieving independence, c) developing higher-order thinking skills, d) developing agricultural competencies, and e) acquiring job skills.

SAE benefits agriculture teachers by: a) familiarizing them with new technologies and practices, b) promoting positive school/community relations, c) promoting parental involvement in the education process, d) motivating students, and e) keeping instruction relevant and practical. SAE also benefits the agricultural industry, community, and employers.

Summary

The SAE concept is a response of agricultural education to changes in the education environment. SAE is designed to reinforce classroom instruction and provide students with fundamental and transferable skills and knowledge through experiential learning. SAE programs benefit students, teachers, the agricultural industry, the community, and employers. The SAE concept is not an attempt to divorce agricultural education from its traditions and foundation, but it is instead a means of expanding agriculture programs to provide meaningful activities for all students.



Laboratory activities can lead to excellent Placement or Entrepreneurship SAE. (Photo courtesy of Cory Dwayne Flournoy, Chicago, IL.)

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The Ultimate Experience

By DR. DAVID DOERFERT

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In a recent survey of employers in Wisconsin, more than 90% said they had a hard time finding enough skilled workers to keep their businesses operating. And 72% of the executives said the lack of skills among their employees frequently or occasionally prevented their companies from competing effectively or expanding. This lack of qualified workers is due in part to rapidly changing job requirements and the advanced skills needed for successful employment (Milwaukee Journal, 1991).

In today's technological workplace, most entry-level jobs require higher levels of critical thinking skills. Employees at all levels must be creative problem solvers and effective team players. All employees will be expected to learn on the job and use math, science, and technology. Future jobs will also require much higher skill levels in reading, oral communication, analysis, and writing.

The best employee is one who has both a good academic background and a certain amount of practical experience. Sound academic preparation provides the foundation for most technical education/training and offers the flexibility for learning additional skills or career change. But both high school and college graduates often find that lack of experience is a substantial obstacle in obtaining a job (Hull, 1992).

The future almost demands a blending of practical and theoretical training in our educational programs. Hands-on experience, coupled with a sound educational base, appears to be among the primary requirements for newly developed jobs.

Tomorrow's Agriculture

For more than two centuries, America's food, agricultural, and natural resource system has been nurtured and sustained by highly dedicated people committed to providing excellent products (Coulter, Goecker and Stanton, 1990). Agricultural education programs have undoubtedly played an important role in the preparation of employees for the dynamic agricultural industry over the past decades. Today, agriculture is the nation's largest employer, with about 21 million people working in some phase of agriculture — from growing food and fiber to selling it at the supermarket (Coulter, et al., 1990). As the agricultural industry plans for the future, agricultural educators must also adjust accordingly if they wish to maintain their important role in preparing future employees for the parent industry.

So where will the jobs be in tomorrow's agricultural industry? According to a study released by the U.S.D.A. entitled *Employment Opportunities for College Graduates in the Food and Agricultural Sciences* (Coulter, Goecker and Stanton, 1990), a surplus of graduates will be available to compete for positions in communication, education, and agricultural production specialities. In contrast, a shortage of more than 11 percent is expected in most non-production agricultural careers such as marketing, merchandising, technical sales, science, engineering, and other specialists.

If agricultural educators are to achieve the balance between the technical agriculture classroom instruction and practical experience needed to prepare students as employees in the agricultural industry, an increased focus must be given to placement SAE programs.

As the agricultural industry plans for the future, agricultural educators must also adjust accordingly if they wish to maintain their important role in preparing future employees for the parent industry.

Placement Programs

Placement SAE programs involve the placement of students in agricultural businesses, in school laboratories, on farms/ranches, or in community facilities. The purpose of a placement program is for students to gain practical experiences needed to enter and advance in their chosen occupational field. These students utilize facilities and other resources provided by employers, schools, or community organizations to develop essential employment competencies. The students do not own the facility or other areas where they are placed. These programs may be paid or unpaid. →

Placement programs may be conducted in any of the areas of agriculture, agribusiness, or natural resources. Placement may occur in school-owned facilities or community areas or facilities. The teacher generally serves as the "job-site" supervisor of experiences which are carried out in school facilities. Sites for these experiences may include school farms, land laboratories, forestry plots, school greenhouses, meat laboratories, and others.

In helping students select an SAE, the agriculture instructor must consider the needs and interests of students, parents/guardians, and the agricultural industry, as well as the availability of resources to support the SAE. The can be a very difficult task for an agricultural educator. Linking classroom instruction with the diverse technical applications found in today's agricultural industry is often an overwhelming task. Far too often an instructor will have a student "get a job" and then plan the experience. This usually results in a poor experience, which leaves the student soured on the possibility of future employment in that sector of agriculture, and possibly even agriculture in general.

Placement SAE provides real-life experience in applying technical and personal skills. (Photo courtesy of Jason Perkins, Fayette, Alabama)

Quality Matters

Learning seldom occurs in a poor, unstructured environment. Furthermore, poorly planned and unsupervised SAEs will not allow students to make the connection between the classroom and the world of work. If a placement SAE program is to achieve the desired outcomes of increased levels of agricultural skills and knowledge, as well as higher problem solving and critical thinking skills, then quality must be the focus.

To achieve quality in all placement SAE programs, especially those where the instructor does not have professional experience, agriculture instructors must rely on their partners in agricultural education — employers, alumni, advisory committees, and community groups. As a 4-H leader relies on project leaders for a variety of 4-H projects, agriculture instructors must utilize their partners when securing possible experience sites, developing student SAE plans and objectives, and in evaluating progress made by the student. This does not mean that the instructor should forego all responsibilities with an SAE program that they have little related professional experience. On the contrary, the instructor is the educational expert and is responsible for the educational experiences of each enrolled student. The role of the partner is as a "technical consultant" providing advice and guidance in the achievement of a quality SAE program.

School-Based Placement Experiences

Placement projects demand flexibility in meeting the needs of today's agriculture student and employers. In many communities it may be extremely difficult to find a site that will provide students with the type of experiences they may need to achieve their career objective. Creative use of school or home facilities and community resources may result in excellent training stations for individual and group learning experiences. Some creative examples might be:

- using the school greenhouse or nursery, students could establish a horticulture business which could beautify the school and community grounds;
- caring for plants/animals in elementary school classrooms;
- assisting school food service personnel in the preparation/presentation of the daily lunch program;
- establishing a nature study trail in a school or community forest;
- managing the annual FFA fruit sale;
- assisting in the operation and management of the school store.

Achieve the Ultimate Experience

In the past, it was believed that the only good supervised experience program was one that lasted the entire four years that a student was enrolled in Agriculture I, II, III, and IV. Today, many students enroll in agriculture courses for only a semester or two. These students cannot be educationally ignored because it is not worth our time and effort to develop an experience program for such a short period of time. If we truly believe that students learn best when learning is by doing, then we must provide students with SAE programs related to their career objectives and the classrom instruction they receive. It is not the length or quantity of experience that matters but rather the quality of the experience. An intense, well-planned four-week experience can provide the types of desired outcomes that a poorly planned and supervised four-year program can never hope to achieve. Quality hands-on experiences that are planned, regularly supervised, and related to classroom instruction are in the student's mind, the ULTIMATE EXPERIENCE!

→

THEME ARTICLE

Expanding SAE: Exploratory Programs

By LARRY R. ARRINGTON
Dr. Arrington is professor of agricultural education at the University of Florida, Gainesville.

The lack of understanding of the American food and fiber system on the part of youth and the general public has been well documented in recent years. The newest type of supervised agricultural experience (SAE), exploratory programs, can assist in addressing this concern. An exploratory SAE program is a series of activities and/or projects designed to increase student agricultural career awareness and agricultural literacy. Students are supervised by agriculture teachers in cooperation with parents/guardians and other adults who assist students in the development and achievement of their educational goals.

Exploratory SAE programs are designed primarily for, but not limited to, middle school students. However, exploratory SAE programs can also be used by high school students for complementing entrepreneurship and placement programs.

Nature of Exploratory SAE

There are two types of exploratory SAE activities, **career exploration** and **agricultural literacy.** Most exploratory SAE activities will incorporate some of both types of activities.

Career Exploration

The first type of exploratory SAE is designed to increase agricultural career awareness. According to the National Academy of Science report, **Understanding Agriculture: New Directions for Education** (1988), "neither students nor Americans in general have a realistic view of agriculture's scope, career possibilities, or involvement with scientific progress and the use of sophisticated biological, chemical, mechanical, and electronic technologies" (p. 22).

Middle school students, in particular, need to explore agricultural career possibilities. Most students make their initial career decisions in middle school. The exploratory SAE program can be an excellent technique to further expand career knowledge.

Exploratory SAE can also assist in addressing two other recommendations of the National Academy Report. First, exploratory SAE can help female and minority students become alert to agricultural careers, since both groups tend to be under-represented in agricultural occupations and professions. Secondly, exploratory SAE can address the need to emphasize professional agricultural careers to a greater degree, showing the connection between college preparation and agricultural leadership, business, and scientific occupations.

Exploratory SAE programs designed to increase career awareness might include interviewing agriscience personnel, mentoring or shadowing, and conducting hands-on activities related to an agricultural career. For example, a student interested in food processing might process an agricultural product to explore the knowledge and skills needed by workers in that industry. Other examples of exploratory SAE →

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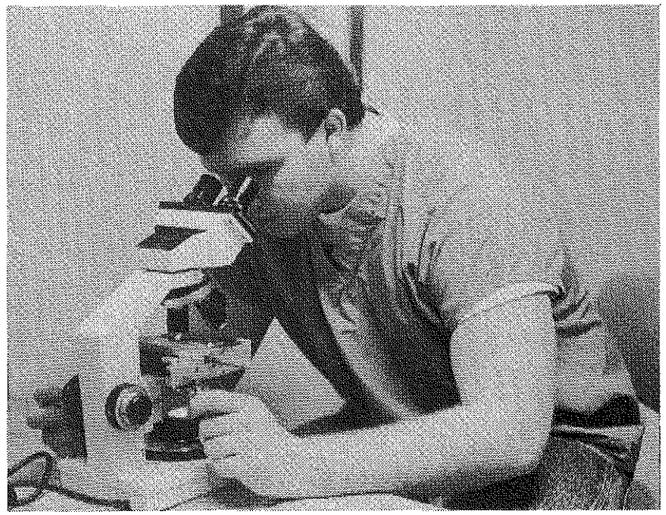
"Workforce Taken To Task." **Milwaukee Journal,** August 17, 1991. ■

activities that emphasize agricultural careers include:

- Preparing a paper on food science careers, including salaries and educational requirements.
- Interviewing the management and employees of an agricultural mechanics business and reporting on the types of decisions they make.
- Observing and/or assisting an electrician.
- Writing a college or university about careers offered in animal, soil, and plant sciences.
- Assisting on a horse farm for one day.
- Attending an agricultural career day.
- Collecting pictures from magazines and newspapers on opportunities in a specific agricultural career area.
- Collecting sample job applications from agricultural businesses.
- Taking a personal inventory test to determine occupations in which a student is interested.



Research activities can be an important part of Exploratory SAE. (Photo courtesy of Benny Joe McDonald, Mt. Juliet, TN)

Agricultural Literacy

The exploratory SAE program for developing agricultural literacy emphasizes increased knowledge about agriculture. It is comprised of a series of experiential learning activities designed to accomplish one or more of five objectives identified by Russell, McCracken, and Miller (1990):

1. Develop understanding of ethical and environmental issues related to agriculture.
2. Develop the ability to grow and care for plants and animals.
3. Develop understanding of the relationship between agriculture and diet.
4. Develop an appreciation for agriculture's relationship to national and international economic and trade systems.
5. Develop an understanding of issues relating to agricultural policy of the federal government.

Exploratory SAE programs directed at agricultural literacy include activities in laboratories, greenhouses, businesses, and at home. Specific examples might include:

- Conducting an experiment.
- Developing a term paper on agricultural marketing.
- Growing a small garden.
- Touring an agricultural business.
- Reporting on the agricultural development of a foreign country over the past 50 years.
- Touring an agricultural museum.
- Interviewing a health official and reporting on ways that agriculture contributes to water and air pollution.
- Attending an agricultural field day and reporting on observations.
- Displaying different nails and/or fasteners.
- Visiting supermarkets and identifying the various types of retail cuts sold.
- Constructing a display of various plumbing fixtures.
- Going to a horse show and describing the different breeds represented.
- Presenting a speech or demonstration on floral design to another group.
- Charting the life cycle of different species of fish.

Program Implementation

The teacher is the key to the success of the exploratory SAE program. The teacher's primary responsibilities related to conducting exploratory programs can be divided into these five areas:

- Assisting students in program selection
- Assisting students in planning the program
- Supervising
- Evaluating
- Coordinating with students, parents, and the community.

Before students can select appropriate activities, they must understand SAE. A unit of instruction on SAE should be taught during the first week of school. For middle school students, the focus should be on the exploratory program. Not only should students be taught about exploratory SAE, they should also be given numerous examples of possible programs. →

Selecting and planning an exploratory program includes two other important components. First, the teacher must determine what the minimum standards will be followed for the exploratory SAE program. How much time will the student be required to invest? Will there be a minimum number of activities required? What type of record keeping will be required? What percentage of the course grade will be determined by SAE?

Secondly, teachers must assist students in selecting the areas of agriculture in which they wish to work. This requires that teachers outline for students all units that will be taught.

Next, teachers must assist students in preparing a written list of exploratory SAE activities to be accomplished, including dates and types of assistance needed by the teacher, parent/guardian, and others.

EXPLORATORY SAE PLANNING SHEET

NAME: _____

LENGTH OF PLAN: STARTING _____ ENDING _____

AGRICULTURAL INTEREST AREAS:

1. _____
2. _____

CAREER GOALS:

1. _____
2. _____

EXPERIENCES	ASSISTANCE NEEDED	DATE	EVALUATION
1.			
2.			
3.			
4.			
5.			
6.			

STUDENT SIGNATURE: _____

TEACHER SIGNATURE: _____

PARENT SIGNATURE: _____

Supervision of exploratory SAE will be different from supervising entrepreneurship and placement programs. Less emphasis will be placed on individual on-site visitation, and more emphasis will be placed on group supervision and supervision through record keeping. Exploratory SAE records should be checked at leaast once per grading period.

Evaluation of exploratory SAE programs should be based upon accomplishment of the original planned activities, realizing that not all activities require the same amount of time and effort. One evaluation procedure would be the requirement of a minimum number of activities for each grade (e.g., completing five activities earns an A, three activities earns a B, etc.). Record keeping is always a key ingredient in evaluating the SAE programs.

The teacher's final responsibility related to exploratory SAE is to coordinate students, parents, and the community. The teacher will need to keep a list of potential sites where students can gain exploratory SAE experience. Annual surveys can be conducted to determine interest and willingness on the part of individuals and businesses to participate in the program.

The exploratory SAE program is not the only answer to the need to increase agricultural literacy and career awareness. However, it is another tool that can be used to address these needs.

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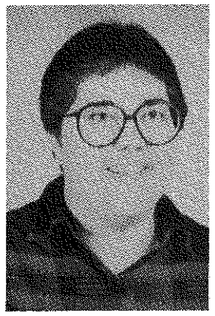
Correction

In the October 1992 issue an incorrect author byline was used for Linda Whent. Dr. Whent is supervisor of teacher education in the agricultural education program at the University of California, Davis, and also Program Director of the Agriscience Institute and Outreach Program.

Entrepreneurship — Still The Mainstay of SAE



By LINDA D. MOODY
Ms. Moody is an agriculture teacher at East Butler High School, Brainard, NE.

An entrepreneur can be defined as a person who owns, manages, and assumes financial risk in a business venture. Many people have a narrow definition of entrepreneurship. They see entrepreneurship as a business that is new and innovative, the first of its kind. By using a broader definition, entrepreneurship encompasses any person who takes initiative (risk) in starting a business.

The agricultural industry, which was developed on the idea of free enterprise, has many entrepreneurs. These individuals exhibit optimism, resourcefulness, and persistence. They are goal oriented and have a good work ethic. They do not let failure and disappointment deter them from success. These qualities are desired by industry in its employees. An entrepreneurship supervised agriculture experience (SAE) program can enable students to develop the necessary skills and competencies to become established in their own business or gain employment after college graduation.

Agricultural education programs have had a strong tradition of successful ownership supervised agricultural experience programs. Why then, are we now using the term, entrepreneurship? The answer is simple. For over 60 years we have been developing entrepreneurs. Business and industry are accustomed to the term entrepreneur and will understand much better what we are developing in our students. If we provide instruction in entrepreneurship and have as a goal that all students have an entrepreneurship program, whether big or small, agricultural education will meet the needs of business and industry.

Business and industry are always looking for employees that are responsible and have had experience in managing, operating, and assuming risk in a business venture. Therefore, the purpose of an entrepreneurship SAE program is to assist in developing entrepreneurial skills needed to meet the student's career objective (Barrick, Arrington, Heffernan, Hughes, Moody, Ogline & Whaley, 1992).

Today, with the expansion of the agricultural industry and the declining number of farmers and ranchers, the nature of entrepreneurship programs is changing. Entrepreneurship programs can be developed in production agriculture (e.g., livestock, crops, aquaculture, hydroponics, and horticulture), agricultural sales and service, natural resources, forestry, marketing, agricultural mechanics, agricultural processing, and other career areas.

Entrepreneurship programs may be conducted in a variety of places: the most common is the home or family business. If these two settings are not available, the student should look for opportunities in the community and/or school facilities. Students should not overlook the option of forming student cooperatives. Students could form cooperatives by raising strawberries at the school land laboratory. Since students own the materials, manage the business, keep records, and assume financial risk, this is an entrepreneurship program.

For over 60 years we have been developing entrepreneurs.

Entrepreneurship Opportunities

Students should inventory their entrepreneurship opportunities with parents/guardians and the agriculture instructor. All too often students do not take full advantage of available opportunities. For example, many students from established farm or ranch backgrounds are not fully aware of their fortunate circumstances relating to SAE. Far too often their goals are not nearly as ambitious as one could expect. On the other hand, urban students and students living on limited acreage may have high goals but little apparent opportunity. The opportunities are usually present and can be identified and developed with a little ingenuity. By knowing the agricultural interests and resources available, students can pursue entrepreneurship programs.

For students whose parents own an agricultural business, it is often possible to → identify areas that the student can manage and operate. Another possibility is that the student form a partnership with the family business and have specific tasks and responsibilities. This makes a more meaningful SAE than personally owning one animal in a large herd.

Requirement of an Entrepreneurship Program

In developing a quality, comprehensive, entrepreneurship SAE program, several criteria must be met:

- Personal ownership of the materials or other inputs required for the business.
- Complete and accurate records.
- Management of daily operations.
- Business decisions.
- Programs must be of sufficient duration to include a complete learning cycle or to gain a variety of agricultural competencies.
- Incorporation of improvement activities to increase the efficiency of the business (Barrick, et al., 1992).

Entrepreneurship programs must be planned to show long term growth. Feeding one animal a year to show at the fair is a somewhat limited SAE program. Getting one year's experience four times is not four years of experience. In this situation students should be encouraged to get started in a livestock program that can be developed and result in the acquisition of a variety of competencies.

Entrepreneurship possibilities exist almost everywhere. The following are examples of entrepreneurship programs that can be developed:

- Livestock production — beef, sheep, swine, dairy, poultry, and goats.
- Crop production — grains, fibers, and horticulture crops.
- Agribusiness — turf installation, tree care, telemarketing, small engine repair, beekeeping, and worm farming.
- Cooperative activities — group or class recycling centers.
- Raising quail, pheasants, elk, alligators, speciality animals, and exotics.
- Production of specialty crops — canola, kiwi, pumpkins for jack-o-lanterns, berries, and mushrooms.
- Hydroponics — lettuce, peppers, onions, and tomatoes.
- Recreational animals — horses, dogs, and cats.
- Specialized animals for narrow markets — goats, ostriches, llamas.
- Growing crops and animals for research and providing donor cows for embryo transplants.
- Agricultural processing — cheese, honey, and cedar shakes.
- Recreational businesses — hunting and fishing guides.

(Barrick, et al., 1992)

Traditionally, entrepreneurship programs consisted of livestock and crops. Today, entrepreneurship opportunities have expanded to include chinchilla raising, fish farming, beekeeping, greenhouse production, and nurseries. Students and teachers at times overlook the opportunities that are available. Students should inventory the possible entrepreneurship programs in the community. Poultry operations, vegetable production, tree-farming should not be overlooked — the opportunities are endless.

Entrepreneurship opportunities exist on school farms, in greenhouses and/or nurseries, agricultural mechanics laboratories, and other school facilities where students may rent acreage or space, grow and market their own produce, and develop needed competencies. Students with maximum or moderate opportunities are thought to be easier to serve. Yet, those with minimal situations may benefit the most from SAE.

Student benefits of Entrepreneurship Programs

- Career Planning
- Business Understanding
- Application of Skills
- Community Understanding
- Orientation to Change
- Creativity
- Critical Thinking and Problem Solving Skills

(Barrick, et al., 1992)

Entrepreneurship programs offer several benefits to students and a comprehensive agricultural education program. With all these benefits, how can we not have as a goal that every student be involved in an entrepreneurship program? Business and industry want employees with these characteristics. As an educator, we can make it happen. All it will take on our part is time and creativity.

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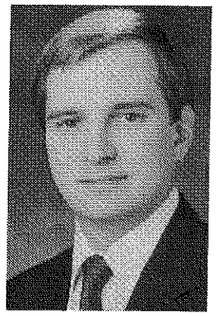
Volunteerism As SAE



By JAMES CONNORS
Mr. Connors is a graduate assistant in the Department of Agricultural & Extension Education at Michigan State University, East Lansing.

Supervised experience programs have always been an important part of a student's education in and about agriculture. However, today's agricultural education programs include numerous students who have no agricultural background on which to base a supervised experience program. One solution to finding good, relevant, supervised experience programs for all agricultural students is to utilize volunteer opportunities within the local community.

Service learning activities are rapidly becoming a major part of high school curricula around the country. The State of Maryland will soon require all high school students to complete 75 hours of community service in order to graduate. Other states, such as Washington and Vermont, are also experimenting with community service projects for high school students. In Washington, Project Service Leadership (PSL) is being used in many school districts to integrate service into curricula (McPherson, 1991). SerVermont is a small initiative in Vermont that gives schools a vehicle to introduce the students to the responsibility of citizenship (Parsons, 1991).

Community service and citizenship have long been important components of agricultural education and FFA. However, many agriculture teachers consider them group activities, such as part of FFA's Building Our American Communities program. But with the latest push for more experiential education for high school students, community service and volunteerism can play a major role in all students' supervised experience programs.

Projects

Service learning, community service, or volunteerism all can become a part of supervised experience programs in agricultural education. One need not live in a rural agricultural community to find examples of projects that include agricultural and natural resources components. City parks, conservatories, and arboretums offer excellent volunteer opportunities for students interested in horticulture or natural resources. Zoos can offer exceptional educational experiences for students interested in zoology or animal health careers. Most zoological parks have special programs for individuals willing to donate time and labor for improving the zoo for animals and visitors alike.

Service learning activities are rapidly becoming a major part of high school curricula around the country. Community service and citizenship have long been important components of agricultural education and FFA.

Students interested in learning more about a particular species of animal could volunteer time to breed associations, breeders cooperatives, or livestock fairs and shows. Many local community service organizations offer community gardening programs that can use volunteer labor. Government agencies like the Soil Conservation Service, Cooperative Extension Service, Fish and Wildlife Service, and the Forest Service often have volunteer positions that offer training and experience in agriculturally related fields. The opportunities available for enterprising young students are numerous. Most public or private organizations would be elated to have volunteer help. →

Individual students can volunteer to perform landscaping jobs for local residents who are financially or physically unable to do the work.

SAE — Entrepreneurship

These volunteer, community service projects fit perfectly into a student's supervised experience program. Whether the student has an entrepreneurship or placement SAE, volunteer activities should be included. These activities can also be used as improvement activities within entrepreneurship or placement programs. Volunteer experiences offer students a chance to work with community-based organizations, while learning valuable skills that will benefit them in their chosen career.

What better way to learn entrepreneurship than by working closely with successful agribusiness professionals. However, in today's economic climate many business owners might be leery of hiring students for the sheer purpose of training. But, most agribusinesses in local communities would be more than willing to allow a volunteer access to their business to gain valuable knowledge of the agribusiness world. Students interested in production entrepreneurship projects could seek volunteer opportunities with various crop farms, nursery and landscape businesses, flower shops, or livestock industry operations. Agribusinesses that might allow student volunteers include machinery dealerships, livestock processing facilities, or financial lending institutions.

Service learning, community service, or volunteerism all can become a part of supervised experience programs in agricultural education. One need not live in a rural agricultural community to find examples of projects that include agricultural and natural resources components.

SAE - Placement

Volunteer activities should also be included in all placement SAE programs. Agricultural and natural resources students who select a placement type SAE can choose between a paid and unpaid experience program. For financial reasons, most students will select a paid experience program. However, students should be advised that selecting an experience program solely on the basis of monetary returns might not be the best decision. Students need to set goals for their SAE program and decide what experiences will benefit them the most for their chosen field. In some cases, an unpaid SAE program might be the wisest choice.

Unpaid, volunteer SAE programs can be either school based or community based. School-based programs can include volunteering to manage the school greenhouse, nursery, forest, or land laboratory. Students could volunteer to assist with maintaining the school landscape or conducting a soil inventory of school owned property. Many schools operate nature trails for educational purposes. Students could volunteer to improve these resources for the benefit of their school and community.

Unpaid, community-based SAE programs probably offer the greatest variety of volunteer opportunities for students. Communities can use assistance with economic development projects, beautification plans, recycling programs, and safety awareness campaigns. Local civic organizations often have community development programs that can benefit from volunteer help. Local, county, and state governmental agencies often operate under tight budgets and can use the skills of volunteers. All of these organizations need the services that volunteers offer. They also provide volunteers with valuable experiences that can be useful in future employment situations.

Improvement Activities

No matter what type of SAE a student chooses, improvement activities play a major role. Improvement activities include learning activities that improve the value or appearance of the place of employment, home, school, or community; the efficiency of an enterprise or business; or the living conditions of the family. These learning activities are usually on a volunteer basis. Volunteer improvement activities enable students to learn valuable skills while helping to improve their surroundings.

Future business leaders who have entrepreneurship programs can volunteer to assist local commodity groups, livestock organizations, or agribusiness associations. Businesses can always benefit from having production costs evaluated or marketing strategies developed. Students can volunteer to conduct product need surveys or evaluate quality control practices. Agriculture students and FFA members who are employed can volunteer their labor to assist with beautification projects to improve the appearance and efficiency of the business. Those students who are unemployed can volunteer their skills to community or governmental organizations to improve their homes, schools, or community resources. →

Recognition

Volunteer work that agriculture students conduct should not go unrecognized. There are many opportunities for individuals to receive acknowledgement and awards for volunteer activities. The most familiar vehicle through which volunteer work can be recognized is the FFA's Building Our American Communities program. While most BOAC projects are conducted by groups of FFA members, individual recognition can be received through the Achievement in Volunteerism Award. This award specifically acknowledges the work of individual FFA members who have volunteered their skills and labor to benefit their homes, schools, and communities.

Other programs which recognize individual and group volunteer projects include the federal government's "Take Pride in America" program and the USA Weekend Magazine's "Make a Difference Day." Numerous communities around the country also offer Volunteer Days and community service opportunities that provide the vehicle and recognition for volunteer activities.

Conclusion

The unselfish act of volunteering to assist one's community is a noble gesture. As agricultural education expands, volunteerism and community service activities should be encouraged for all students. Agriculture students and FFA members who actively volunteer time and labor to improving their homes, schools, and communities learn to take pride in their environment and are less likely to destroy valuable community resources.

The third goal of the Strategic Plan for Agricultural Education states "To amplify and expand the 'whole person' concept of education, including leadership, personal and interpersonal skills" (The National Council for Agricultural Education, p. 4). A well educated, compassionate person recognizes the shared value of community service. Agricultural education is in the unique position of being able to stress the importance of community service and volunteerism through SAE programs. Agricultural education and FFA pride themselves on developing strong leaders and good citizens. One method of developing good citizens is to include volunteerism as a major part of every student's SAE program.

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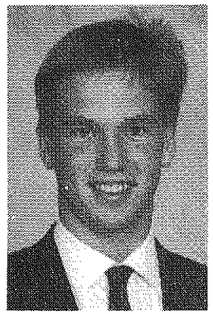
Due Dates For Upcoming Themes

Issue/Theme	Due to Theme Editor	Theme Editor
April *Teaching Agrimarketing*	January 1, 1993	Dr. Jim Leising Agricultural Education Dept. of App. Behav. Sciences University of California Davis, CA 95616
May *Lab Facility Improvement*	February 1, 1993	Dr. Glen Miller Dept. of Ag. Education College of Agriculture University of Arizona Tucson, AZ 85721
June *Agricultural Educators in Non-School Settings*	March 1, 1993	Dr. Al Mannebach School of Education Box U-93 249 Glenbrook Road University of Connecticut Storrs, CT 06269-2093
July *Strengthening Programs*	April 1, 1993	Dr. Earl Russell Agricultural Education 124 Mumford Hall 1301 West Gregory Drive University of Illinois Urbana, IL 61801

Supervised Agricultural Experiences in the 21st Century — Cutting Edge or Obsolete?



By Danny Grellner & Dr. James D. White

Mr. Grellner (top) is an undergraduate student in agricultural economics and Dr. White is a professor of agricultural education at Oklahoma State University, Stillwater.

Imagine it's the year 2012 and you are a high school junior enrolled in agricultural sciences and technology at your school. Your agriculture instructor asks you to begin recording your final figures of the calendar year in order to be eligible for the state FFA technology degree. As you begin to write in your experiences and the hours worked while you were on the space lab, you discover some old files from 1992 containing the record book of your mother when she was an agriculture student some 20 years before.

You begin to thumb through the record book and see that they still raised cattle on pasture and that they were also raising crops in the fields. Then you look at the section under "Experiences and Skills Learned" to find that students then were listing experiences such as: vaccinated heifers, performed artificial insemination, calculated feed rations, and squared a barn. There were no experiences listed for genetically engineered cattle herd, performed cloning of high protein wheat strains, developed synthetic feed supplement, or designed holographic energy field to house animals. You thought to yourself, "How things have changed!"

The Importance of SAE

Agricultural education is constantly faced with new and more difficult challenges than ever before, as educators seek to redefine and refocus their efforts in providing a solid educational experience that links the classroom with practical application and education with industry. The most vital component of the agricultural education vehicle as it relates to providing young people with career opportunities and a chance to explore the industry is the supervised agricultural experience (SAE) program.

Future of SAE

With the advent of America 2000 and a nationwide call to revitalize American education, supervised "hands-on" experience has become a recirculated buzzword among all educators. Agricultural educators have long been aware of the benefits of supervised experience. The emergence of practical application as a reconfirmed essential in education lends credence to the notion that SAEs will continue to be a viable part of education long into the 21st century.

The most vital component of the agricultural education vehicle as it relates to providing young people with career opportunities and a chance to explore the industry is the supervised agricultural experience (SAE) program.

To be certain, though, we must reexamine the mission of SAE and how it fits into the process of providing a total educational experience. That examination must focus not on what the SAE has been in the past, but what needs will be served in the year 2000 and beyond and what educators must do to be flexible enough to meet those needs. SAEs in the future must provide the following needs:

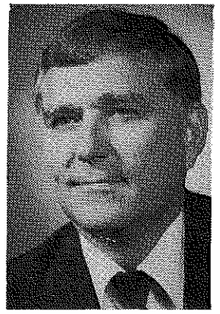
1. SAEs must allow students to apply cutting-edge technology in agriculture. One of the strengths of SAE is that it allows students an opportunity to apply cutting-edge technology in agriculture. The previously mentioned example illustrates the need to keep pace with advances in agricultural technology in order that students are current with the industry. No one can be sure what technological advances will take place in the next century or even the next 20 years. If the changes that have taken place in the last 20 years are any indication of the next 20 years, however, it is critical that agricultural education be aware of what is happening in the industry. A student leaving an agriculture program today with only the knowledge that his or her mother or father acquired would be greatly disadvantaged. Information increases at such a rapid rate that just being current is not enough. We must see into the future and project what needs will be there.

(contined on page 23)

FEATURE ARTICLE

TIME MANAGEMENT

Building the Foundation for Effective Time Management



By
DR. GARY MOORE
Dr. Moore is professor of agricultural education at North Carolina State University, Raleigh.

Some time managment "experts" go way overboard. They suggest you memorize poetry and shave, all while taking your morning shower. While eating breakfast they suggest you perfrom four additional tasks. These experts will carefully analyze how you perform your daily tasks and identify how you can save five seconds in performing Task A and 10 seconds on Task B. There is nothing inherently wrong with these suggestions. These experts are simply trying to get you to be as efficient as possible.

However, there is a major difference between being efficient and being effective. Being efficient means doing the job right; being effective means doing the right job. A laudable goal in time management is to work on becoming effective, that is doing the right job, and then work on becoming more efficient at it.

Four Steps Toward Becoming An Effective Time Manager

1. Identify Personal Values - The first step in effective time management is to ask the question "What are the highest priorities or values in my life? Most individuals have five to nine values that are of utmost importance to them. Values are concerned more with a state of "being" than the state of "having." Some of the values people might have include being a good family member, being an exceptional FFA advisor and having an outstanding FFA chapter, being financially secure, owning and operating an agricultural operation, being physically fit, being recognized as an outstanding teacher, leading a spiritual life, and so on.

After the values are identified one sentence should be written stating the value in a positive "I am" or "I have" statement. For each statement write a brief paragraph describing what it means. These values should be in writing and kept in a notebook, daily calendar, or some other place where they can be constantly reviewed.

2. Set Goals Based On Values - The second step in becoming an effective manager of time is to establish long range goals. While this is common sense and might be considered trite by some, the fact remains that this is a crucial step in becoming an effective manager of time. It provides the foundation for everything else that is done in time management. Research shows that less than 20% of the population have specific long range goals.

The values in your life help determine your goals. Goals must be based on personal values if they are to be meaningful and serve as a guide for effective time management. If a person simply writes down a number of laudable goals that are not based on that person's value system, the chances are slim that the goals will be reached. For example, to have a goal of being physically fit when you really don't value physical fitness enough to watch what you eat and exercise is just a hollow goal.

There should be one long range goal for each of the values you have identified. A long range goal is one that can be attained in about 3 to 10 years. Each goal should have three characteristics:

Attainable but Challenging - Goal must be realistic. They cannot be pie in the sky, wishful thinking; they must be goals that a person can reasonably expect to attain. A goal should cause you to stretch. If a goal is set too low, it will not really motivate you.

Measurable - For a goal to be really helpful, it must be measurable. How will you know when it has been attained?

Written - Research has shown that people are four times more likely to achieve goals if they are in writing. Goals should be written and should be readily available so they can be reviewed frequently.

3. Establish Intermediate Goals - After major long range goals have been established, specific intermediate goals should be identified for each long range goal. Each intermediate goal should be specific and have an anticipated date for completion. These intermediate goals all contribute to reaching the long range goal. When all of the intermediate goals have been accomplished, the long term goal should be looming on the horizon. →

4. Use a Daily Prioritized Task List (a "To Do" list) - An important principle in time management is to identify tasks or jobs that are of high value or importance and then do those jobs first. Even though we may feel good about getting many small and unimportant jobs dones because we stay busy and feel a sense of accomplishment in getting something done, we really aren't moving forward.

Every day should start with a list of tasks that need to be accomplished. These tasks should be prioritized. A good system is to assign an "A" to all tasks that are of great importance and need to be accomplished during the day; a "B" is assigned to tasks that are of importance and would be nice to get accomplished during the day; "C" tasks are relatively unimportant and can wait. After all the tasks are assigned a letter, take all the tasks with the same letter and rank them 1, 2, 3, and so on. Start the day with task A1, then go to task A2, and so on.

In determining which tasks should get the "A" priority rating, remember urgent and important are not the same. At times we tend to concentrate on urgent tasks and never get to important but not urgent tasks. Every day try to identify at least one task from your list of intermediate goals and make sure that gets on the prioritized daily task list. Your values should constantly be in mind when determining how to prioritize the times. Tasks that contribute to attaining your goals should be prioritized higher.

Summary

If we follow the four steps listed above, we will be working on what the Franklin International Institution has identified as the productivity pyramid. We will be on the path to becoming effective; we will be doing the right job. We can then work on doing the job right.

A favorite exam question the late Dr. Charlie Curtis of LSU asked graduate students was to explain the meaning of the phrase, "A ship with no port of destination knows no favorable wind." Think about it. If you don't have a destination in mind, it really doesn't matter how the wind blows. Likewise, if you have no clear professional or personal goals that are rooted in your value system, it really doesn't matter how you spend your time. ■

Cutting Edge or Obsolete?

(continued from page 21)

2. SAEs must become microcosms of industry in action. The application of cutting-edge technology is not enough to justify SAE programs of the future. In fact, perhaps more emphasis should be placed upon broadscope education that gives a tremendous amount of lateral experiences within agriculture. For example, an ideal SAE would provide high school students with experiences in all aspects of the industry, from production to processing and distribution to retailing. Many young people are undecided about their chosen occupation while in high school. A broader-based supervised experience program also provides industry with young people who relate to varied sectors of agriculture, rather than trapping students with a narrow background.

3. SAEs must encourage students to be innovative and entrepreneurial. Finally, the individual ownership of the SAE and the individual commitment to a supervised experience program are two of the basic strengths of SAE. Programs of the future must foster this free enterprise spirit that encourages young people to invest and take risks within the agribusiness sector. Before real learning can take place, responsibility must be taken by the student for the end result of the supervised program. It is inherent that these influences in learning will greatly enhance the total value of the supervised agricultural experience.

The New Generation of SAE Instruction

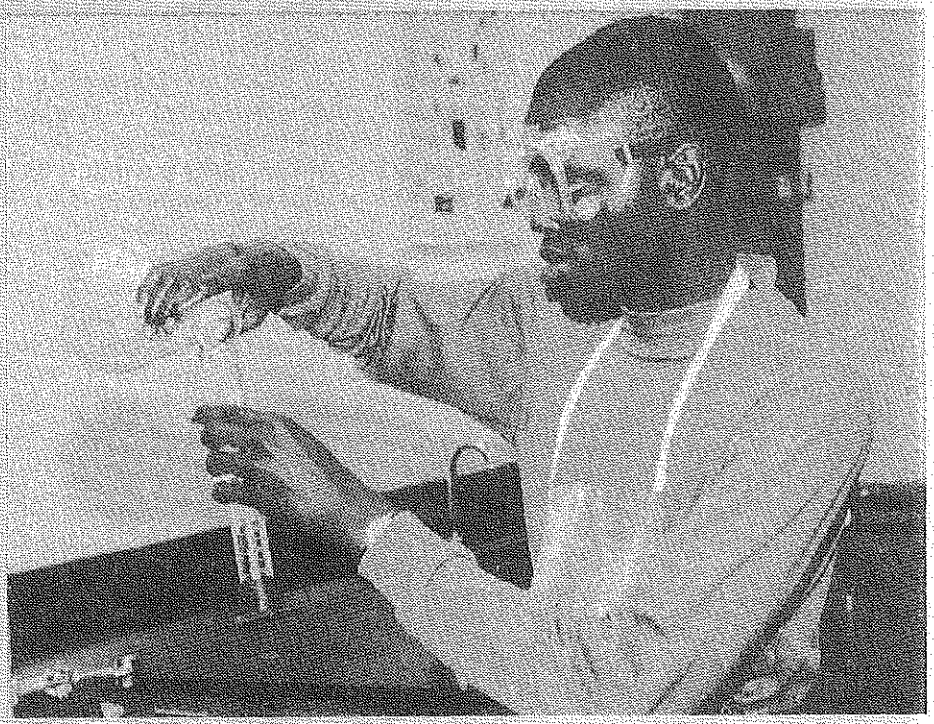
Technology will continue to redefine the way in which we teach our young people. The new generation of SAEs will reflect a growing change around the country to integrate new technologies into the classroom. As well, the definition of the classroom of the future is destined to be somewhat different than the current one. These changes alone will constitute a refocusing of energies to rethink the way classrooms are used in education. Agriculture programs will surely pioneer into space as scientific power and knowledge become stronger. These changes alone will take incredible measures to prepare young people to meet the exploding needs of American agribusiness in space.

Conclusion

Agricultural educators must become increasingly aware of the changing face of science and technology in agriculture. The SAE of the future will be a vital part of the agriculture curriculum as long as those in the trenches believe that updating instruction, curriculum, facilities, classrooms, and the SAE is important. ■

STORIES IN PICTURES

FFA contests, fairs, and other programs serve to reinforce learning and motivate students to participate in SAE programs. (Photo courtesy of Jay Eudy, Austin, TX)



School-based SAE programs can be developed in indoor and outdoor lab settings.

NEW FOR 1993

Beginning with the January issue, eight new feature columns plus a Book Review column will appear on a rotational basis in 1993 issues. Feature columns will include international agriculture, Ag Ed in the elementary schools, teaching agriscience, SAE programs, FFA Advisement, marketing your program, food science, and research on teaching. Special Editors for the 1993 Feature Columns will appear on the inside front cover of each 1993 issue, beginning with the January issue. If you have ideas for one of these feature columns, please contact the respective Special Editor.

As indicated in the November issue, space will be allocated in 1993 issues for two new article types. First, teachers, teacher educators, state supervisors, and others are invited to share success stories with others in the profession via *The Magazine*. Original copy should be two to three double-spaced typewritten pages forwarded to the Editor. Any aspect of agricultural education at all levels is appropriate for the ***Success Stories*** feature.

Also new for 1993, agricultural educators are invited to share their views on specific aspects of agricultural education through a new ***Forum*** feature column. This column will allow members both within and outside the profession to debate specific issues in agricultural education. Original copy should be sent directly to the Editor and should be two to three double-spaced typewritten pages. Copy for the ***Success Stories*** and ***Forum*** columns may be submitted to the Editor at any time. **Let others learn from your successes and views on agricultural education!**