Introduction to SAE

From National SAE Web Site
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Read this carefully!

EXTRA!!! The Times EXTRA!!!

Wanted: Landscape Maintenance worker, Operate a lawn mower and power blower. Need a person who can work with out supervision. Experience required. Call 515-7743.





Read this carefully!

EXTRA!!! The Times EXTRA!!!

Vet Assistant needed. Mayflower Animal Hospital needs an experienced individual to work 20 hours a week. Duties including bathing animals, grooming and feeding of animals. Apply in person at 316 Walnut Street.



Read this carefully!

EXTRA!!! The Times EXTRA!!!

Wanted: Dependable person to handle over the counter sales in a busy garden center. Pay is \$7.50 an hour. Neat appearance important along with the ability to work with people. Experience in working with plants a must. Call 515-2396 for an interview.



What was the same in all 3 ads?

- Each advertisement wanted the person to be experienced. People who have experience have the edge in landing a job. But:
 - How do you get experience without first having a job?
 - How do you get a job without first having experience?



Gaining Experience!!

- Question:
 - How can you gain experience to get a job (or prepare for college)?
- Answer:
 - Supervised Agricultural Experience (SAE)



What is SAE?

• Supervised Agricultural Experience (SAE)
Programs consist of planned practical
activities conducted outside of class time in
which students develop and apply
agricultural knowledge and skills.



How Does a SAE Help Me?

- Develop skills that can be used in getting a job
- Provides the opportunity to make money
- Develops skills that can be used in starting you own business
- Helps development management skills



How Does a SAE Help Me...?

- Learn record keeping skills
- Improves analytical and decision making skills
- Teaches responsibility
- Provides the opportunity to explore possible careers



How Does a SAE Help Me...?

- Develops knowledge and skills that could be helpful in college, as a hobby or for recreation.
- Provides the opportunity to win awards: FFA proficiency awards are based on the SAE program. In addition to winning awards, money can be won at regional, state and national levels



How Does a SAE Help Me...?

- FFA degrees are partially based on the SAE. You must have a SAE program to advance.
- In order to be a state or national officer, you first must have an advanced FFA degree which is partially based on SAE.
- Could help the grade in Agriculture class.



Types of SAE

- Entrepreneurship
- Placement
- Research
 - Experimental
 - Non-Experimental
- Exploratory
- Improvement
- Supplemental



Entrepreneurship

• The student plans, implements, operates and assumes financial risks in a farming activity or agricultural business. In Entrepreneurship programs, the student owns the materials and other required inputs and keeps financial records to determine return to investments.



Entrepreneurship examples:

- Growing an acre of corn
- Operating a Christmas tree farm
- Raising a litter of pigs
- Running a pay-to-fish operation
- Growing bedding plants in the school greenhouse
- Owning and operating a lawn care service
- A group of students growing a crop of poinsettias



Placement

• Placement programs involve the placement of students on farms and ranches, in agricultural businesses, in school laboratories or in community facilities to provide a "learning by doing" environment. This is done outside of normal classroom hours and may be paid or non-paid.



Placement Examples

- Placement in a florist shop
- Working after school at a farm supply store.
- Working on Saturdays at a riding stable
- Working in the school greenhouse after school and on weekends and holidays
- Placement on a general livestock farm



Research

• An extensive activity where the student plans and conducts a major agricultural experiment using the scientific process. The purpose of the experiment is to provide students "hands-on" experience in:

1. Verifying, learning or demonstrating scientific principles in agriculture.

- 2. Discovering new knowledge.
- 3. Using the scientific process.



Research Examples

- Comparing the effect of various planting media on plant growth
- Determining the impact of different levels of protein on fish growth
- Comparing three rooting hormones on root development
- Determining if phases of the moon have an effect on plant growth



Examples, continued

- Analyzing the effectiveness of different display methods on plant sales in a garden center
- Demonstrating the impact of different levels of soil acidity on plant growth
- Determining the strength of welds using different welding methods



Research...

• There are two major types of Research Projects - Experimental and Non-Experimental. The previous slides described experimental. The two slides that follow describe non-experimental research.



Non-Experimental Research

• Students choose an agricultural problem that is not amenable to experimentation and design a plan to investigate and analyze the problem. The students gather and evaluate

data from a variety of sources and then produce some type of finished product.



Non-Experimental Examples:

- A marketing plan for an agricultural commodity
- A series of newspaper articles about the environment
- A land use plan for a farm
- A landscape design for a community facility
- An advertising campaign for an agribusiness



Exploratory

 Exploratory SAE activities are designed primarily to help students become literate in agriculture and/or become aware of possible careers in agriculture. Exploratory SAE activities are appropriate for beginning agricultural students but is not restricted to beginning students



Exploratory Examples:

- Observing and/or assisting a florist
- Growing plants in a milk jug "greenhouse"
- Assisting on a horse farm for a day
- Interviewing an agricultural loan officer in a bank
- Preparing a scrapbook on the work of a veterinarian
- Attending an agricultural career day



improvement (minor component)

• Improvement activities include a series of learning activities that improves 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. An improvement activity involves a series of steps and generally requires a number of days for completion.



Improvement Examples:

- Landscaping the home
- Building a fence
- Remodeling and painting a room
- Overhauling a piece of equipment
- Building or reorganizing a farm shop
- Renovating and restocking a pond
- Computerizing the records of an agricultural business



Supplementary (Minor)

• A supplementary activity is one where the student performs one specific agricultural skill outside of normal class time. This skill is not related to the major SAE but is normally taught in an agricultural program, involves experiential learning and does contribute to the development of agricultural skills and knowledge on the part of the student. The activity is accomplished in less than a day and does not require a series of steps.



Supplementary Examples:

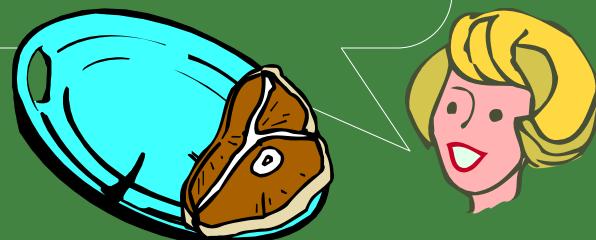
- Pruning a fruit tree
- Changing oil in a sod cutter
- Balling & burlaping a tree
- Helping a neighbor castrate pigs
- Cutting firewood with a chain saw
- Staking tomatoes



When thinking about the different components of a SAE program, it might help to think of a meal. No one likes an empty plate!



If we add a steak to the plate, this is similar to having an **Entrepreneurship** SAE. For decades, Entrepreneurship has been the foundation of SAE. But a steak by itself doesn't make a balanced meal!

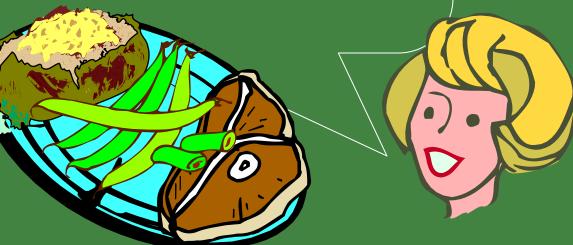




The passage of the Vocational Education Act of 1963 caused more interest in off-farm agriculture. This resulted in adding **Placement** as a type of SAE. We can think of the potato as Placement on our SAE plate.



With the increased emphasis on science in agriculture, a need arose in the 1990s for a new type of SAE activity - **Research**. The green beans represent this addition to our SAE plate.





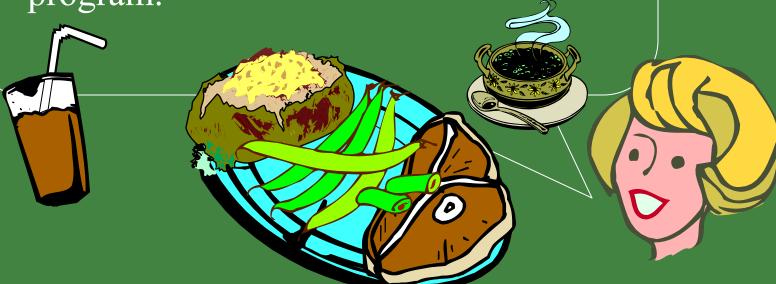
We now have a full plate. However, our meal would be improved by the addition of several additional items. These additional items help round our our SAE plate. We call them minor SAE components.



The addition of a soup or salad helps start a meal. **Exploratory** activities are designed to help students start their SAE programs.



A beverage would help compliment the meal. **Supplementary** SAE activities help complement the SAE program.





Adding a dessert rounds our our meal.

Improvement activities help round out the SAE plate.





While a SAE program can contain just one or two different types of activities, the goal should be to have a full plate of different activities. This maximizes learning.







Turning SAE into a JOB

• A "word ladder" is an activity where one letter in a word is changed to form a new word. You change one letter at a time until you have a new word. See if you can change SAE into JOB.

• J O B

• ___ __ __

' ___ _

' — — —

• S A E