Course	Agricultural Science II
Unit	Supervised Agricultural Experience
Lesson	Types of Supervised Agricultural Experience
Estimated Time	90 minutes or two 50-minute blocks

Student Outcome

Differentiate between SAE types and associated expectations.

Learning Objectives

1. Identify the five types of SAE.
2. Identify characteristics and explain expectations for each type of SAE.
3. Explain how laws and regulations affect placement SAEs.

Grade Level Expectations

Resources, Supplies & Equipment, and Supplemental Information

Resources

1. PowerPoint Slides
   - PPt Lesson 2 – Types of Supervised Agricultural Experience
2. Handout
   - HO 1 – Internet Resources
3. Activity Sheet
   - AS 1 – SAE Types
4. Garton, B., ed. *Agricultural Education Program Planning Handbook for Missouri Schools*. 5th ed. University of Missouri-Columbia Department of Agricultural Education. Accessed June 18, 2007, from http://ssu.agri.missouri.edu/aged/resources/handbook/.
5. *Supervised Agricultural Experience (Student Reference)*. University of Missouri-Columbia: Instructional Materials Laboratory, 2007.
6. *Supervised Agricultural Experience Curriculum Enhancement*. University of Missouri-Columbia: Instructional Materials Laboratory, 2007.

Supplies & Equipment

- ❑ Road map, if desired

Supplemental Information

1. Internet Sites
   - ❑ Agricultural Proficiency. National FFA Organization. Accessed August 21, 2007, from http://www.ffa.org/index.cfm?method=c_programs.proficiency.
   - ❑ Missouri Department of Labor and Industrial Relations. Accessed June 25, 2007, from http://www.dolir.mo.gov.
   - ❑ Missouri General Assembly. Accessed June 25, 2007, from http://www.moga.mo.gov.
   - ❑ National Institute for Occupational Safety and Health. Accessed August 17, 2007, from http://www.cdc.gov/niosh/.
   - ❑ SAE Central. North Carolina State University Department of Agricultural and Extension Education. Accessed June 28, 2007, from http://www.cals.ncsu.edu/agexed/sae/toolbox/.
   - ❑ SAE: Supervised Agricultural Experience. National FFA Organization. Accessed June 18, 2007, from http://www.ffa.org/index.cfm?method=c_programs.SAE.
   - ❑ U. S. Department of Labor Employment Standards Administration. Accessed August 17, 2007, from http://www.dol.gov/esa/.
   - ❑ Youth Rules! Accessed August 17, 2007, from http://www.youthrules.dol.gov/index.htm.
2. Print
   - ❑ *Missouri Agricultural Record Book for Secondary Students*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.
   - ❑ *The Official FFA Student Handbook*. National FFA Organization. Available at FFA Unlimited. Accessed June 28, 2007, from http://www.ffaunlimited.org/nsth-01.html.

Interest Approach

Divide the students into small groups. Tell the students that they will write out directions for one of the other groups to an unknown destination in Missouri. Each group will determine the destination of their directions but cannot include the destination in any of the directions. The directions must include a minimum of 10 turns and cannot use interstate highways, and the destination must be at least 50 miles away. Students have five minutes to prepare the directions.

Have the students hand in their directions. Distribute the directions to the groups; make sure that no group gets its own directions.

Tell the students they have two minutes to determine where the directions are taking them.

Discussion questions:

- ❑ How would you like to begin a trip without knowing where you are going?
- ❑ How would you like letting someone else determine your direction and destination?
- ❑ Could you have found an easier way to get to your destination?

Use the discussion to introduce the idea that there are different "roads"—or types of SAEs—to help students reach their destination.

Communicate the Learning Objectives

1. Identify the five types of SAE.
2. Identify characteristics and explain expectations for each type of SAE.
3. Explain how laws and regulations affect placement SAEs.

Instructor Directions	Content Outline
Objective 1 🗀 PPt 1 – Five Types of SAE	**Identify the five types of SAE.** 1. Exploratory 2. Entrepreneurship 3. Placement 4. Research/Experimental 5. Analytical
Objective 2 *If class rules and expectations are posted in the room, point them out to the students. Why do we have class rules? We need to know what is expected, so we can perform or accomplish a task. An*	**Identify characteristics and explain expectations for each type of SAEs.** Exploratory – An exploratory SAE project is a small project completed by the student to investigate different career possibilities and SAE programs in a variety of areas. 1. Exploratory projects are planned by the student, instructor, and parent.

Instructor Directions	Content Outline
SAE is very similar. There are expectations for each type of SAE that help us know what is expected, who is responsible, and how to evaluate the SAE. *For a list of example exploratory SAEs, see "Exploratory SAE Opportunities" in Chapter 8 of* Agricultural Education Program Planning Handbook for Missouri Schools. *Accessed August 23, 2007, from http://ssu.agri.missouri.edu/aged/resources/handbook/.* *For a current list of Agricultural Proficiency Award areas, along with sample ideas for entrepreneurship and placement SAEs, see Agricultural Proficiency at the National FFA Organization Web site. Accessed August 23, 2007, from http://www.ffa.org/index.cfm?method=c_programs.proficiency.* AS 1 – SAE Types PPt 2-11 – Characteristics and Expectations for SAEs	2. The number of hours the student works, the materials used, and the competencies and skills demonstrated are recorded in the student's Record Book. 3. Examples of exploratory projects include the following: a. Plant science: Collect insect specimens and label and organize them. b. Animal science: Create a display with pictures and descriptions of the major breeds of beef cattle. c. Natural resources: Job shadow a conservation agent. d. Horticulture: Perform a plant cutting in the school greenhouse. e. Agricultural mechanics: Create a design for a farm shop. f. Agricultural business/sales/marketing: Create an advertisement for your FFA chapter fundraiser. g. Food science: Complete a country cured ham project. h. Leadership and communication: Create a scrapbook for your FFA chapter. Entrepreneurship – An entrepreneurship SAE project is a project in agricultural production or agribusiness that is owned and managed by the student. 1. Students should create a plan early in high school to grow their entrepreneurship projects from a small, modest beginning into a successful project. 2. Entrepreneurship projects are planned by the student, instructor, and parent. 3. Purchases, receipts, and competencies and skills are recorded in the student's Record Book. 4. For an entrepreneurship SAE to be successful, the student must exhibit a good work ethic, and the project must show growth and improvement. 5. Examples of entrepreneurship projects include the following: a. Production: Swine, vegetable, specialty crop, and specialty animal production b. Agribusiness: Providing a lawn care or engine

Instructor Directions	Content Outline
	repair service or operating a custom hay hauling operation Placement – A placement SAE project is a project in which a student is employed at an agribusiness firm, school or community facility, farm, or ranch. This may include paid and unpaid labor. 1. Placement projects are planned by the student, instructor, parent, and employer. 2. The number of hours worked, wages earned, work-related expenses (including wage deductions), and competencies and skills demonstrated are recorded in the student's Record Book. 3. For a successful placement project, the student must exhibit a positive attitude and good work ethic and must show growth and improvement in his or her work skills and competencies. 4. Examples of placement projects include the following: a. Paid: Working as a hired hand on a farm or ranch and working in a farm-supply store or florist shop b. Unpaid: Completing community improvement projects and working after school in the school greenhouse or agricultural mechanics shop Research/experimental – A research/experimental project is a project in which a student plans and conducts an agricultural experiment using the scientific process. 1. Research/experimental projects are planned by the student, instructor, and parent. 2. To successfully complete the project, the student must identify a problem facing the agricultural industry and use scientific processes to come up with possible solutions. 3. The number of hours worked, receipts and expenditures, and competencies and skills are recorded in the student's Record Book. 4. Examples of research/experimental projects include the following: a. Performing an experiment on the effects of feed additives on cattle

Instructor Directions	Content Outline
	b. Comparing the effects of different pest-control methods on greenhouse crops Analytical – For an analytical SAE project, a student identifies an agricultural problem that is not amenable to experimentation and designs a plan to investigate and analyze the problem. The student gathers and evaluates data from a variety of sources and produces a finished product that addresses the problem. 1. Analytical projects are planned by the student, instructor, and parent. 2. A written report evaluating and documenting the outcomes of the research may be the expected product for an analytical SAE project. 3. The number of hours worked, receipts and expenditures, and competencies and skills are recorded in the student's Record Book. 4. Examples of analytical SAE projects include the following: a. Tracking agricultural commodity markets over a period of time b. Creating a land-use plan for a local farm c. Developing a marketing plan for a local business d. Studying agricultural law and completing a research paper on the topic
Objective 3 *HO 1, Internet Resources, may be used to help students locate information regarding child labor laws and other issues concerning youth employment.* HO 1 – Internet Resources PPt 12-19 – Laws and Regulations Affecting Placement SAEs	**Explain how laws and regulations affect placement SAEs.** According to the Missouri Department of Labor and Industrial Relations, each year nearly 3,000 young Missouri workers are injured seriously enough to file a worker's compensation claim. Thirty-eight percent of these injuries are in agriculture-related areas. 1. Work hours in Missouri for 14- and 15-year-olds, Labor Day to June 1: a. 3 hours a day on school days b. 8 hours a day on nonschool days c. 6 days a week d. 18 hours a week (per federal law) e. Work may not begin before 7 a.m. f. Work may not continue after 7 p.m.

Instructor Directions	Content Outline
	2. Work hours in Missouri for 14- and 15-year-olds, June 1 to Labor Day: a. 8 hours a day b. 6 days a week c. 40 hours a week d. Work may not begin before 7 a.m. e. Work may not continue after 9 p.m. 3. No worker in Missouri under 16 may do the following types of work: a. Handle or apply pesticides b. Drive, ride, or assist in operating a tractor or forklift c. Drive any vehicle for transporting passengers d. Use any power-driven equipment such as a chain saw, hay mower, hay baler, or cotton picker e. Work from a ladder or scaffold 4. Workers under 16 need a work certificate from their public school district office to work during the school year. 5. When state and federal laws do not agree, the stricter law applies, but both laws must be complied with. Everyone has a legal right to be treated fairly and work in a safe environment. If you feel these rights are not being respected, you may wish to contact one of the following agencies or visit their Web site for additional information. 1. Occupational Safety and Health Administration (OSHA) – OSHA was created to prevent work-related illnesses, injuries, and deaths. OSHA works with employees and employers to ensure compliance with health and safety standards. 2. Missouri Commission on Human Rights (MCHR) – The MCHR, which is part of the Missouri Department of Labor and Industrial Relations, will investigate claims of discrimination in employment on the basis of race, color, religion, national origin, ancestry, sex, disability, and age. 3. U. S. Department of Labor – The Department of Labor offers information on a number of work-related issues including equal employment opportunity, wages and hours, workplace safety and health, and youth employment.

Instructor Directions	Content Outline
	4. National Labor Relations Board (NLRB) – The NLRB works to prevent or correct unfair labor practices, whether by employers or labor organizations.
Application: AS 1 – SAE Types	Answers to AS 1 Answers will vary. Other activities 1. Divide the class into eight groups. Give each group a space on the chalkboard or provide poster-size paper for each group. Randomly assign one of the eight types of exploratory SAEs to each group. Have a contest to see how many examples each group can identify. Discuss the results with the class and add additional examples, if desired. Repeat this idea for each type of SAE, using different contest ideas for each area (e.g., have an individual contest to see who can list the most examples of entrepreneurship SAEs in one minute.) 2. Play "hot potato" as a review and have students name each of the 5 types of SAEs and give one example.
Closure/Summary	There are five types of SAE projects: exploratory, entrepreneurship, placement, research/experimental, and analytical. Each type of project has its own characteristics and expectations, and each is suited to reaching specific goals and objectives. Planning is an important part of SAEs. Student should work with the appropriate individuals—their instructor, parent, and employer, if applicable—to plan their SAE to help ensure that it will be a success.
Evaluation: Quiz	Answers: 1. B 2. C 3. E 4. A 5. B 6. D 7. C 8. E

Instructor Directions	Content Outline
	9. C 10. D