

National Council for Agricultural Education
***Philosophy and Guiding Principles for Execution of the Supervised
Agricultural Experience Component of the Total School Based
Agricultural Education Program***

(Approved by the NCAE Board of Directors March 31, 2015)

Experiential learning in school based agricultural education allows local programs to extend beyond the classroom and into the community in order to develop an individual student's industry and career-based competencies. The methodology for delivering such high quality experiential learning is the Supervised Agricultural Experience (SAE). The SAE is a required component of a total Agricultural Education program and intended for every student. Through their involvement in the SAE program students are able to consider multiple careers and occupations, learn expected workplace behavior, and develop specific skills within an industry, and are provided opportunities to apply academic and occupational skills in the workplace or a simulated workplace environment. Through these strategies, students learn how to apply what they are learning in the classroom as they prepare to transition into the world of college and career opportunities.

Each portion of the title "Supervised Agricultural Experience" is significant in describing what is expected of all teachers and students of agricultural education. Teachers should provide supervision of and guidance for the student's program while engaging other necessary partners such as parents and/or employers. Planning and documenting the expected outcomes at the outset of the SAE and getting agreement from all necessary parties is essential and requires guiding the student in reflection throughout the life of the program for deeper understanding and improvement. The teacher should provide on-site instruction when and where appropriate but also be able to use other methods such as social media, computer technology, written documentation, and group meetings to provide the appropriate supervision, instruction and guidance. In today's educational environment it is difficult to expect that agricultural educators will be able to conduct multiple onsite instructional visits each year to all student SAE programs, but on-site instruction should be provided as guidance.

The second major descriptor of a high quality SAE is that the student's program is agricultural in nature. While it is not necessary that a program take place on a farm, ranch or other private agricultural enterprise the experience program should correlate with classroom instruction and a student's career exploration, interest and planning within one of the recognized Agriculture, Food and Natural Resources (AFNR) career pathways. While many students of agricultural education may end up pursuing fields outside these pathways, it is necessary that agricultural educators as part of a career and technical education program should engage all students in exploring and identifying interests they would have within AFNR. Once student interest is identified, teachers can work with these students to build a program that includes the appropriate experiences necessary to build contextual knowledge and skill toward career readiness in that field. A guide for the types of skills and competencies that should be developed by an SAE program in a given AFNR pathway resides within the National AFNR Common Career Technical Core (CCTC), National AFNR Content Standards, Career Ready Practices and the 21st Century Skills. For students in the agricultural education program who have already identified a

career interest outside of AFNR, consideration should be given to how an SAE can help that student develop skills and competencies within AFNR context that are transferrable to the student's main area of interest.

Finally, the definition of the experience itself is critical to understanding what is considered high quality experiential learning and high quality SAE for school based agricultural education. Agricultural educators provide experiential learning on a daily basis through inquiry based teaching methods, directed laboratory instruction in school facilities, field trips, and FFA competitive events. What makes the SAE component different is that the activity ties back to some level of career planning, is student rather than teacher managed, happens outside of formal classroom instruction, and takes place in a real world environment (i.e. farm, ranch or agricultural enterprise) or simulated workplace environment (i.e. virtual program or school lab//greenhouse/farm). This does not mean that SAE cannot happen on the school campus or even during the school day but rather serves as a distinction to help teachers understand the difference between the classroom/laboratory instruction program component and the SAE program component. In reality, to be able to engage all students in SAE some use of simulated work environments may be necessary.

To further define the types of SAE programs available to and appropriate for students of school based agricultural education please refer to the following examples:

- **Exploratory** - This type of SAE is appropriate for all agricultural students. This SAE activity is designed primarily to help students become literate in agriculture and/or become aware of possible careers in the AFNR career cluster and results in the development of a plan to begin an SAE in one of the following categories (see below). The Exploratory SAE is designed to be embedded as the individual student activity of the career exploration curricular component of ANFR coursework.
- **Placement / Internship** – Placement / Internship programs involve the placement of students in agriculture, food or natural resources related businesses, on farms and ranches, in school laboratories, at community facilities, or in a verified non-profit organization to provide a "learning by doing" environment. These experiences may be paid or non-paid.
- **Ownership / Entrepreneurship** - The student plans, implements, operates and assumes financial risks in a productive or service activity or agriculture, food or natural resources-related business. In these types of programs, the student owns the materials and other required inputs and keeps financial records to determine return on investments. An SAE ownership / entrepreneurship program provides students the opportunity to develop the necessary skills to become established in their own business or gain employment. A student moves from an ownership experience into a true entrepreneurship experience when he/she expands the business enterprise to include a business plan that focuses on development of new product, new production / processing processes or additional market opportunities.
- **Research** - As agriculture has become more scientific, there is a need to conduct research to discover new knowledge to meet the needs of a growing world. There are three major kinds of research SAE programs.
 - **Experimental** - 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 firsthand experience in verifying, learning or demonstrating scientific principles in the AFNR career cluster, discovering new knowledge and using the scientific process. In an experimental SAE, there is a hypothesis and a control group, and variables are manipulated.

- Analytical – The student chooses a real-world agriculture, food or natural resource-related problem that is not amenable to experimentation and designs a plan to investigate and analyze the problem. The student will gather and evaluate data from a variety of sources and then produce some type of finished product. The product may include a marketing display or marketing plan for a commodity, product or service; a series of newspaper articles; a land use plan for a farm; a detailed landscape design for a community facility; an advertising campaign for an agribusiness, and so forth. A student-led analytical SAE is flexible enough so that it could be used in any type of agricultural class, provides valuable experience and contributes to the development of critical thinking skills.
- Invention – The student identifies a need in an agriculture, food or natural resource-related industry and performs research and analysis in order to solve a problem or increase efficiency by developing/adapting a new product or service to the industry. The student plans, documents and develops his/her innovation through the iterative processes of design, prototyping and testing with the goal of creating a marketable product or service.
- **School-Based Enterprise** – A student-managed, entrepreneurial operation in a school setting that provides goods or services that meet the needs of an identified market. To provide for the greatest educational value to the student, the SAE should replicate the workplace environment as closely as possible. A School-Based Enterprise SAE is oftentimes cooperative in nature with management decisions made by students, while the teacher is responsible for the integration of technical content and skills. School-Based Enterprises may include, but are not limited to, cooperative livestock raising, school gardens & land labs, production greenhouses; school based agricultural research, agricultural equipment fabrication, equipment maintenance services, or a school store.
- **Service Learning** – A student-managed service activity where students are involved in the development of a needs assessment, planning the goals, objectives and budget, implementation of the activity, promotion, and evaluation/reflection of a chosen project. It may be for a school, a community organization, religious institution, or non-profit organization. The student(s) are responsible for raising necessary funds for the project (if funds are needed). A project must be a stand-alone project and not part of an ongoing chapter project, or community fundraiser. The project must present a challenge that requires leadership, but also something that students can do with unskilled helpers, and within a reasonable period of time. Service Learning SAEs may be individual or a small group effort amongst students.

To provide further explanation and support, the National Council for Agricultural Education also provides the following belief statements in regard to high quality SAE.

We Believe:

- A key component of quality SAE is documentation which includes not only financial recordkeeping but also a record of skills and knowledge attained, credentials or certifications earned, evidence of prior planning, evidence of reflection and evidence of career planning.
- Because there are more than 300 diverse careers in agriculture it is possible that students can engage in suitable SAE for which no FFA outcome may currently be available. SAE is not defined by FFA award or recognition programs.
- SAE should be teacher supervised and guided with the help of appropriate adult mentors to connect to classroom instruction and ensure a safe learning environment for the student.
- SAE supervision does not equate to an onsite visit by the teacher every time and in every instance. Supervision can occur in groups, using computer technology, using social media or any other appropriate measures that allow teachers to be as efficient with their time as possible. However, this does not mean that onsite instructional visits are not valuable for many types of SAE.
- All student SAE programs should conform to national and state youth labor standards and students should attain all appropriate recognized safety and/or OSHA certifications needed to perform necessary job functions included within the SAE.
- Exploration of career interests, requirements and opportunities within a chosen career pathway in AFNR is a key component of quality SAE.
- SAE provides for application of classroom learning (both academic and technical) in a real world setting or simulated real world setting.
- SAE can happen in the school facilities and occasionally during the school day as long as the program is student managed, outside formal instructional time, simulates a real world work environment, is tied to a career plan and is otherwise not connected to directed laboratory instruction by the teacher.
- SAE allows for the establishment of a clear connection between education and the world of work including participation in authentic work related tasks.
- SAE helps students assess and understand the expectations of the workplace.

- SAE supervision requires additional instructor time outside the classroom/laboratory component of the program and should occur on a year round basis; therefore some of this additional time occurs beyond the normal teaching contract. To accommodate this individualized, year-round instruction, the teacher should be provided extended contract days to facilitate supervision during summer months.
- SAE is an extended, individualized instructional component that is part of the student's Career Plan of Study; therefore time and expertise spent in delivering this component should be valued in the teacher's performance evaluation.
- SAE can and should be considered as a source of data for evidence of student growth.
- SAE documentation should be used as a component of industry certification programs.
- SAE documentation should be used as a part of articulation agreements between secondary and post-secondary partners.
- SAE may be utilized to conduct performance assessment of skills for Technical Skill Attainment for Perkins data reporting.
- SAE may also be considered for high school graduation credits.
- SAE documentation and the Career Plan of Study should be a graded component of agricultural coursework.