

# KENTUCKY SAE MANUAL



The Kentucky SAE Manual includes information for teachers of agriculture related to the effective implementation of high quality SAE Programs. The Manual also includes a variety of ready to use classroom resources that can be used in today's classroom.

Supervised Agricultural Experience is any learning experience that an agricultural education student does that enhances what is learned in the agricultural education classroom/laboratory.

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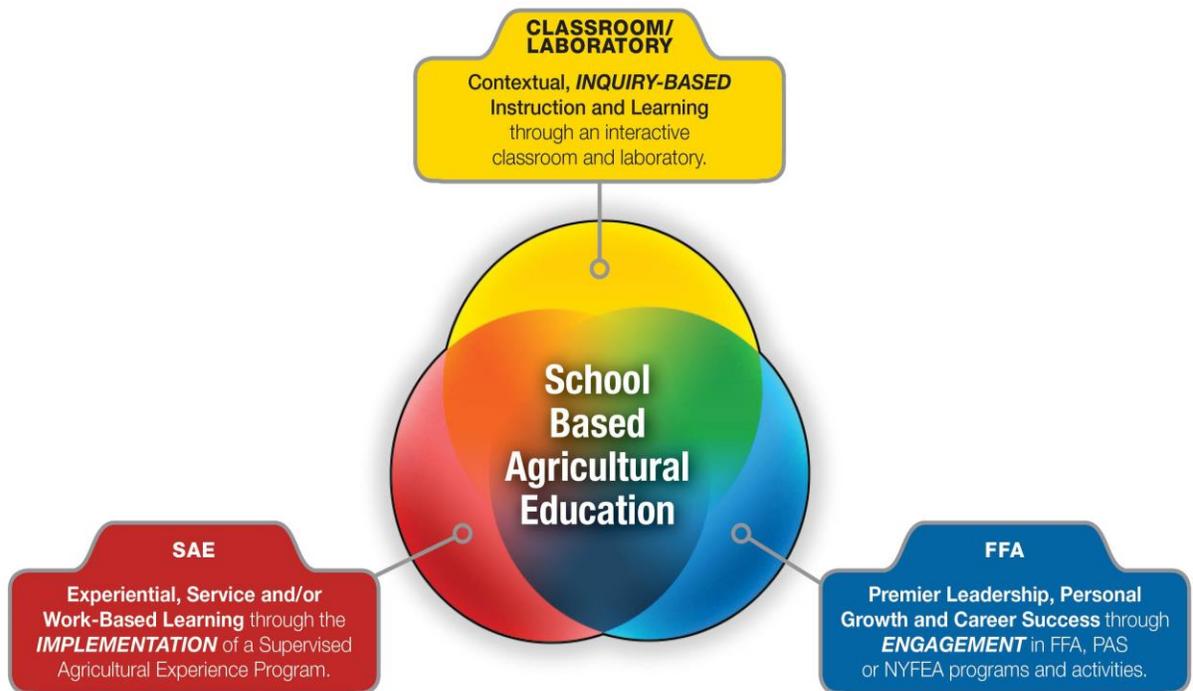
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## Introduction

Agricultural Education has long been comprised of three components. This model is represented by the diagram below.



Classroom instruction involves the teaching of technical agriculture content to students through both classroom and laboratory activities. Supervised Agricultural Experience (SAE) allows students to gain real world work experience and to practice the skills that they have learned in class. FFA provides recognition to students for their accomplishments in both the classroom and SAE areas, while also helping students develop leadership, team work, and communication skills.

Ensuring that the components function equally and effectively together is one of the greatest challenges facing teachers of agriculture today. This manual is designed to help teachers successfully implement SAE as part of the agricultural education program and to integrate with classroom instruction and FFA.

## ***Supervised Agricultural Experience Defined***

Supervised Agricultural Experience is any learning experience that an agricultural education student does which enhances what is learned in the classroom/laboratory.

Supervised Agricultural Experience Programs should :

- Relate to the student's interests and/or chosen career pathway
- Relate to and enhance what is taught in the agriculture classroom
- Be carried out under the supervision of the local agricultural education teacher and/or community members/businesses
- Foster and increase student learning

Supervised Agricultural Experience Programs may be carried out in the school classroom and laboratory facilities. While an SAE may begin during the scheduled school day, the SAE should be at least partially carried out outside the normal school day.

### **Benefits of Supervised Agricultural Experience**

Supervised Agricultural Experience (SAE) has many benefits to students, including but not limited to:

- Opportunities to apply knowledge and skills learned in the agricultural education classroom
- Exploration of career opportunities
- Development of work place skills
- Real world work experience
- Ability to earn money while learning

### **College and Career Readiness**

The ultimate outcome of SAE is readiness for college and productive careers in the agriculture industry. By helping students learn firsthand about career opportunities, SAE Programs help them choose a pathway earlier in their education. SAE provides opportunities for student students to learn and practice communication, team work, and management skills that are highly sought after by employers. Students also learn how to apply academic skills in a real world context which further prepares them to enter post-secondary education.

## ***Types of Supervised Agricultural Experience Programs***

- **Exploratory**- the student strives to learn more about specific areas of agriculture that interest them. This may involve research, job shadowing, interviews, article review, and/or actual work experience. Exploratory projects may or may not lead to other types of projects depending on the student's level of interest.
- **Entrepreneurship**- the student starts his or her own business. They have responsibility for the business including the benefit of potential profits and the management of risk.
- **Placement** – the student has a regular job in an area related to agriculture. The purpose of a placement SAE is to gain real world work experience and gain new skills for use in the job market. Placement includes supervision by an outside person and may be paid or unpaid.
- **Research**- the student engages in research on an agriculture related subject. This may include learning about a specific topic, collecting and analyzing data, experimental research, market research, and/or qualitative research related to agriculture.
- **Service Learning**- the student participates in community service with the goal of practicing or gaining new skills. This may include volunteering with a church or civic organization, organizing a community event, and/or leading service projects for an organization.
- **Improvement Projects**- the student works to improve something in his/her home, community, or school. This could include short term service projects at the school or in the community such as planting flowers or cleaning up a neglected park. It could also include landscaping or remodeling at the students home, refurbishing a piece of equipment, or building something that will be beneficial in the home.



## ***Implementation of Supervised Agricultural Experience***

Having quality SAE Programs requires planning and coordination by the local Teacher(s) of Agriculture. The steps and resources below are intended to assist teachers in this effort.

### **Classroom Instruction**

Each agriculture course should include some instruction related to SAE Programs. The introductory course (usually Principles of Agriculture) should include a unit that covers the types of SAE Programs, benefits of SAE, steps in establishing an SAE, and basic record keeping. The National FFA Organization has several good resources for this unit, which can be found at <https://www.ffa.org/About/WhoWeAre/SAE/Pages/SAEResources.aspx>

### **SAE Planning**

As a product of instruction related to the SAE, all students should plan an SAE. The first step in SAE planning is evaluation of the student's interests, resources, and career plans. The Kentucky Individual Learning Plan (ILP) includes career interest inventory tools that may be of assistance to the student and teacher in assessing the student's interests. The Agriculture Career Network (AgCN) also includes tools related to career assessment and planning. An assessment of the student's resources and career interests is also necessary at this point.

Once the student has identified his or her interests and resources, they should work with the teacher of agriculture and parents to develop Specific, Measurable, Attainable, Related, and Timed (SMART) goals for the SAE. It is recommended that short term (one year or less) and intermediate term (one to five year) goals be set by the student.

Time spent by students and teachers on SAE Planning is categorized as "Explore" on the SAE Continuum. The ultimate success of the SAE will depend largely on the quality of work done by the student during this time.

### **Evaluation**

Each student enrolled in agricultural education should be required to plan and carry out an SAE. It is recommended that students receive credit in the course for work related to their SAE. Grading may be based on one or more of the following: SAE journal entries, records, culminating project, and/or classroom project.

## Supervision

Supervision of SAE activities by the teacher of agriculture is a critical component of successful SAE Programs. The teacher should be in regular contact with the student about his or her SAE Program. This can be accomplished through periodic checks of the student's records as well as brief teacher student conferences about the SAE.

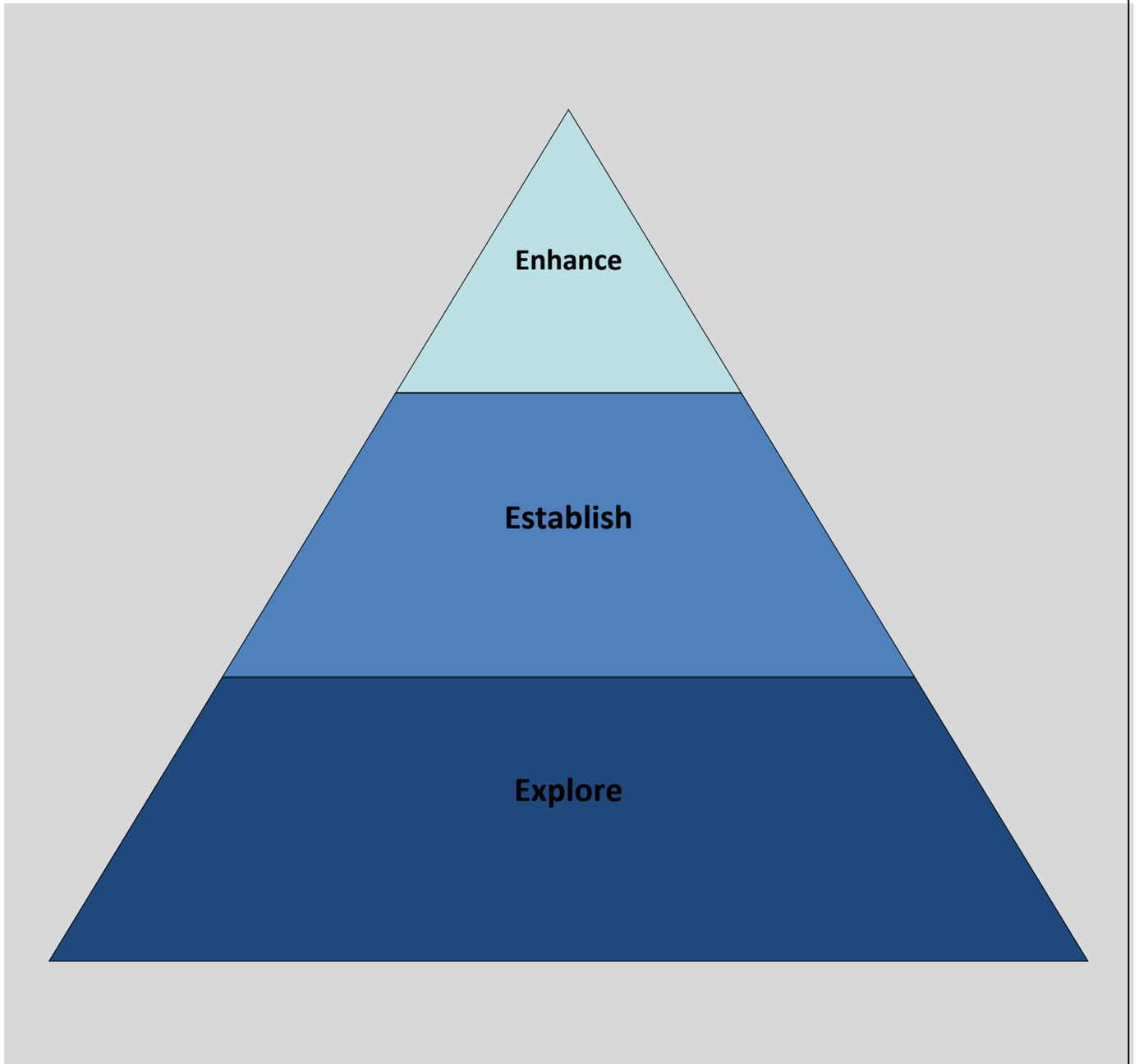
Kentucky teachers of agriculture are expected to spend 20-25 extended days per year supervising student SAE Programs. This supervision may include visits to the student's farm or place of employment, work with the student on record keeping, assisting the student with research, marketing, or skill development related to the SAE, or other tasks deemed necessary to the success of the SAE Program. The type and form of supervision necessary will vary by student, type of SAE, and other factors.

The teacher's main role in SAE supervision is to insure that the student is learning marketable skills as a result of the SAE. SAE supervision is an ongoing dialogue about the student's academic status, career goals, and plans for the future.



## The SAE Continuum

SAE is a learning process that happens throughout a student's enrollment in Agricultural Education. The Explore-Establish-Enhance Continuum for SAE will help insure that learning happens on an ongoing basis for all students.



## Explore

The student begins to explore the agriculture industry and his/her own interests to determine what SAE experiences might be of interest. The Explore stage should include the following:

- Completion of student interest inventories and student resource inventories.
- Research on the agriculture industry or specific sectors that the student has an interest in.
- Interviews with current agriculture workers.
- Job shadowing in one or more areas of interest to the student.

The steps involved in the Explore stage will vary greatly depending on the student's level of knowledge. A student who has no agriculture background or little knowledge of the industry will need to spend a good deal of time researching various sectors of the industry and determining what areas might be of interest to them. On the other hand, a student with a strong interest in beef cattle in the 9<sup>th</sup> grade will need to focus his/her exploration efforts on learning more about the various opportunities related specifically to beef cattle.

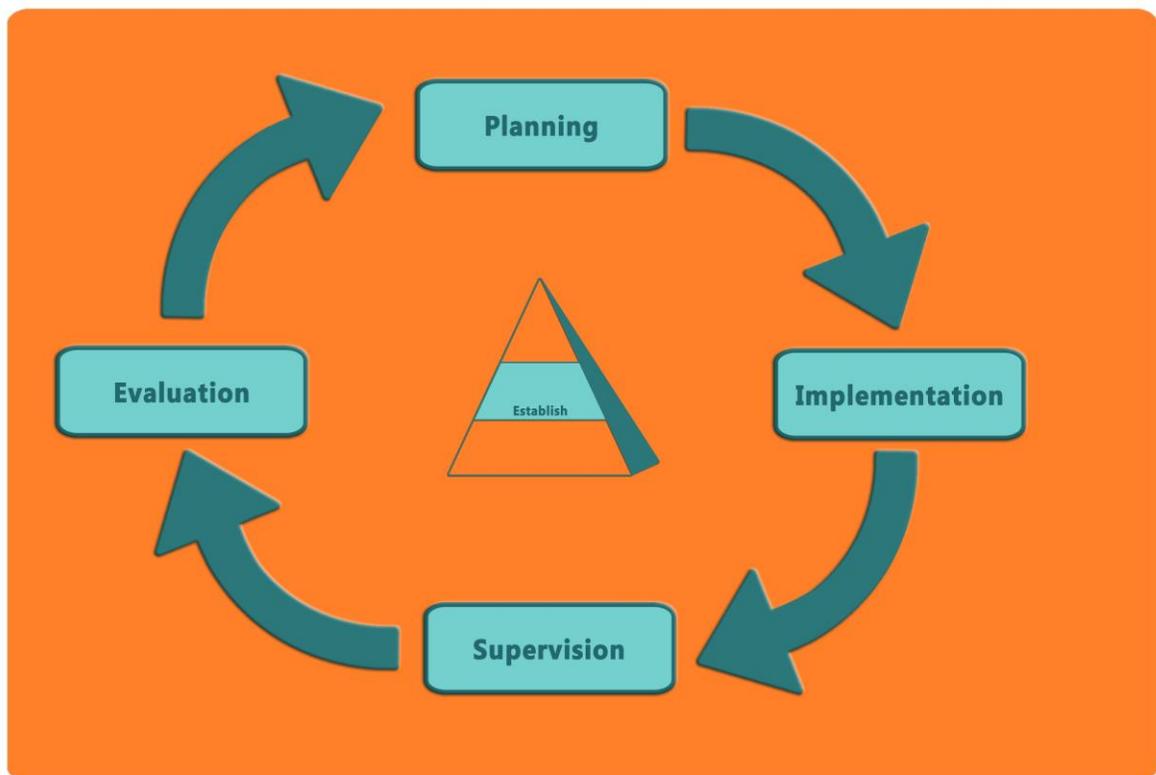
### Explore- Sample Students

<p><b>George- The Farm Kid</b></p> <p><b>George</b> loves cows. His grandparents have a small farm that has fence, equipment, and facilities necessary to raise cattle.</p> <p>George researches breeds of cows, budgets for various types of cattle operations, and marketing opportunities or cattle. He talks with his grandfather about the number of cows he could raise on the farm.</p>	<p><b>Molly- The City Girl</b></p> <p><b>Molly</b> lives in an apartment in with her mother. Her interest inventory shows that she loves helping people and has good organizational skills.</p> <p>Molly researches various service organizations in her community. She visits three of them to learn firsthand what they do. She settles on the local food bank because she is passionate about eliminating hunger.</p>
<p><b>Sam- The Subdivision Entrepreneur</b></p> <p><b>Sam</b> lives in a subdivision but has an interest in machinery and loves to be outdoors.</p> <p>Sam researches various job opportunities that involve machinery and being outside. He narrows his focus to lawn care and then researches what is involved with a lawn care business. He develops a business plan for a lawn care business with help from his Teacher of Agriculture and an Alumni member who mows lawns.</p>	<p><b>Shelly- The Honor Student</b></p> <p><b>Shelly</b> lives in a subdivision and has limited transportation. Her interest inventory shows a strong interest in science and a desire to be a doctor. Her parents want her to focus on her school work.</p> <p>Shelly reads about various kinds of agriculture research. She decides she is most interested in plants. Her Biology teacher and Teacher of Agriculture work with her to help design a study on plant nutrition that she</p>

## Establish

Following completion of the Explore phase, students should move to the Establish phase of SAE development. The information learned through exploratory activities will help guide the student as he/she establishes an SAE. Steps involved in the Establish phase include:

- **Planning**
  - Development of a detailed plan for what will be involved in the SAE
  - Setting goals and developing a timeline.
  - Identifying key partners and the role that each will play.
- **Implementation**
  - Start putting the plan into action. This will vary depending on the type of SAE.
  - For a research based SAE, the student will define a research area, develop plans for research and data collection, conduct and report research.
  - For a placement SAE, the student will identify and secure employment.
  - For a service learning SAE, the student will identify service opportunities and begin work in the service area.
  - For an entrepreneurship SAE, the student will develop a business plan, secure funding, and launch the business enterprise.
- **Supervision**
  - Teacher of Agriculture, parents, supervisors, and/or other adult mentors assist student with making decision, accomplishing goals, and ensuring that learning is taking place.
- **Evaluation**
  - Work with Work with Teacher of Agriculture, parents, supervisors, and/or other adult mentors to gauge progress and plan for the future.



## Record Keeping

Students should keep appropriate records of the work they do and the skills they learn. These records allow the teacher of agriculture to gauge the student's progress and to give credit for work that is completed.

Various formats exist for keeping SAE records, these include but are not limited to:

- Kentucky Agricultural Education Record Book- available at [www.kyffa.org](http://www.kyffa.org)
- Online systems such as Agriculture Experience Tracker (AET)
- Income and labor logs
- SAE Journals

Regardless of the format, SAE Records should document the work done by the student and any money earned or spent. SAE records should also document skill attainment, trainings attended, FFA involvement, and community service activities. For entrepreneurship projects, it is very important that students keep detailed financial records including income, expenses, inventory, and efficiencies. Photographs and videos may be used to supplement written records and prove valuable to students who choose to complete award applications in the future.

## Sample Students

<p><b>George- The Farm Kid</b></p> <p>George develops a business plan that involves back grounding feeders on the farm. He secures an FSA Youth Loan and buys his first calves. His grandfather and Teacher of Agriculture help him make production decisions, deal with health problems, and sell his first crop. George keeps records of income and expenses as well as health records.</p>	<p><b>Molly- The City Girl</b></p> <p>Molly begins working at the food bank on Thursday afternoon and Saturday morning. She becomes the Saturday team leader and helps develop a Facebook page for the food bank. She keeps a journal with the hours she works, tasks she completes, and skills she learns.</p>
<p><b>Sam- The Subdivision Entrepreneur</b></p> <p>Sam begins in January securing lawns to mow in his subdivision. He works out an agreement with his Dad to use his riding mower and uses some savings to buy a trimmer and blower. He keeps records of his income and expenses throughout the year and carefully documents all capital purchases and investments.</p>	<p><b>Shelly- The Honor Student</b></p> <p>Shelly conducts a research trial on the plants in her sun room. She does two additional trials with other nutrients. She documents her work through a research journal, by collecting and graphing data, and by taking photographs.</p>

## Enhance

The student, Teacher of Agriculture, parents, and other adult mentors should regularly assess the status of the SAE. This assessment should occur at pre-determined intervals that fit with the natural flow of the student's work (end of the season, conclusion of research project, end of the semester, etc.) In addition to evaluating progress, the student should:

- Develop plans for the future and set goals for future achievements.
- Determine how to expand upon the experience or to use the skills learned in a new area.
- Complete steps to receive recognition through FFA for SAE related accomplishments.

During the Enhance phase, a student may determine to expand his/her current SAE, to change from one type of SAE to another within a given area, or to shift the focus of his/her SAE based on what has been learned. For example, a student who has been doing research on fertilizer might determine to use the results of the first study to complete another study or apply for a placement job with a local fertilizer dealer or decide to move away from the plant area of agriculture altogether based on a lack of interest.

## Sample Students

<p><b>George- The Farm Kid</b></p> <p>George reinvests his profits into another group of calves. He uses his records to plan for production decisions and decides to renovate his pasture to provide better forage. With the help of his FFA Advisor, he completes a Beef Entrepreneurship Proficiency and sets a goal of being the Regional Star Farmer. He signs up for the Master Cattleman class through the local Extension Office.</p>	<p><b>Molly- The City Girl</b></p> <p>Molly is nominated for a youth community service award and is recognized by her FFA chapter for her volunteer efforts. She plans to use the skills she learned in Ag Communications to develop a promotional plan for the food bank's annual fund drive</p>
<p><b>Sam- The Subdivision Entrepreneur</b></p> <p>At the end of the season, Sam works with his Dad and Teacher of Agriculture to analyze his records. He decides to purchase a new mower and take training so that he can apply chemicals next year. He completes an Agri-Entrepreneurship Award application and plans to enter the Turf Management Proficiency in the future.</p>	<p><b>Shelly- The Honor Student</b></p> <p>Shelly completes an Agriscience Fair project based on her research. Her teachers help her determine possible extensions of the research for future years.</p>

## Teaching Resources

### Introduction To SAE

- [SAE PowerPoint](#)
- [SAE Teaching Directions](#)
- [SAE Goal Sheet](#)
- [SAE Questions and Answers](#)

### Explore

[Career Matchmaker Activity](#) [Type a quote from the document or the summary of an interesting point. You can position the text box anywhere in the document. Use the Drawing Tools tab to change the formatting of the pull quote text box.]

- [Career Matchmaker Activity 2](#)
- [Exploratory SAE Planning](#)
- [Career Research Assignment](#)
- [Exploratory Sample Rotation](#)
- [Exploratory SAE Poster Assignment](#)
- [Resources for Exploratory SAE](#)
- [Job Shadowing Guidelines](#)
- [Job Shadowing Community Letter](#)
- [Job Shadowing Evaluation](#)
- [Community SAE Partners- Sample](#)



### Establish

- [Goal Setting](#)
- [SAE Agreement Sample A](#)
- [SAE Agreement Sample B](#)
- [SAE Visit Guidelines](#)
- [SAE Visit Forms](#)
- [SAE Journal](#)
- [SAE Culminating Project](#)

### Research SAE

- [Research Topics](#)
- [Research Project Assignment](#)
- [Research- University Ties](#)
- [Connecting SAE and Agriscience](#)

### Placement SAE

[SAE Community Partners](#)

[Placement Letter To Employer](#)

### Entrepreneurship SAE

[Funding Sources](#)

[Entrepreneurship Resources](#)

### Service Learning SAE

[SAE Journal Sample](#)



### Enhance

[SAE Reflective Questions](#)

[Agriscience Handbook](#)

[Proficiency Awards Homepage](#)

[American Degree Homepage](#)

[Farmers Tax Guide](#)

### Additional Resources

[Kentucky Ag Ed Record Keeping Materials](#)

[Simple Record Keeping Sheets](#)

[Student Folders](#)

[Student Folder Information Sheet](#)

[Agriscience Unit Plan](#)

[Agriscience Handout](#)

[Agriscience Thesis Assignment](#)

