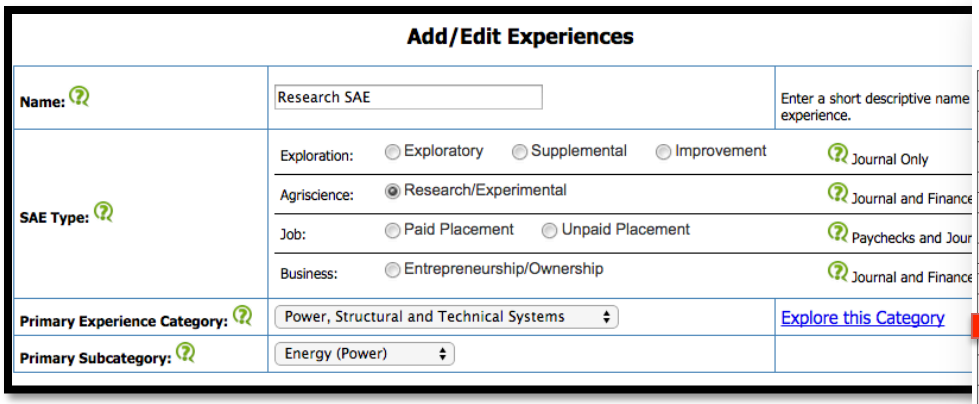
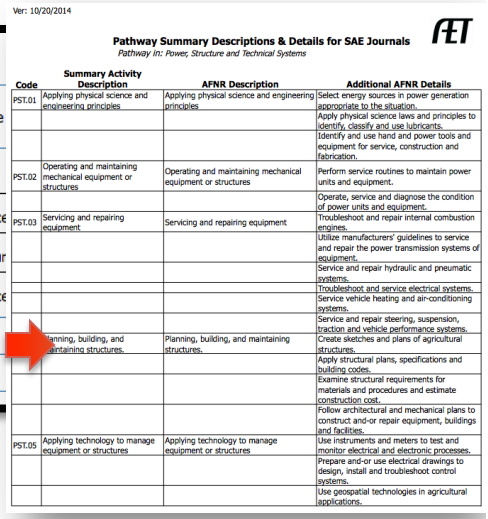
# AET Experience Journals (SAE)

**Purpose:** *This guide provides the steps needed to develop AET Experience Journals, where students record their time invested in SAEs.*

## Step 1: Develop the AET Experience

First, it is important to choose the correct primary SAE category to establish your project and help begin your journal entries.



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**Pathway Summary Descriptions & Details for SAE Journals**

*Pathway In: Power, Structure and Technical Systems*

| Code | Summary Activity Description | AFNR Description | Additional AFNR Details |
|---|---|---|---|
| PST.01 | Applying physical science and engineering principles | Applying physical science and engineering principles | Select energy sources in power generation appropriate to the situation. |
| | | | Apply physical science laws and principles to identify, classify and use lubricants. |
| | | | Identify and use hand and power tools and equipment for service, construction and fabrication. |
| PST.02 | Operating and maintaining mechanical equipment or structures | Operating and maintaining mechanical equipment or structures | Perform service routines to maintain power units and equipment. |
| | | | Operate, service and diagnose the condition of power units and equipment. |
| PST.03 | Servicing and repairing equipment | Servicing and repairing equipment | Troubleshoot and repair internal combustion engines. |
| | | | Utilize manufacturers' guidelines to service and repair the power transmission systems of equipment. |
| | | | Service and repair hydraulic and pneumatic systems. |
| | | | Troubleshoot and service electrical systems. |
| | | | Service vehicle heating and air-conditioning systems. |
| | | | Service and repair steering, suspension, traction and vehicle performance systems. |
| | Planning, building, and maintaining structures. | Planning, building, and maintaining structures. | Create sketches and plans of agricultural structures. |
| | | | Apply structural plans, specifications and building codes. |
| | | | Examine structural requirements for materials and procedures and estimate construction cost. |
| | | | Follow architectural and mechanical plans to construct and-or repair equipment, buildings and facilities. |
| PST.05 | Applying technology to manage equipment or structures | Applying technology to manage equipment or structures | Use instruments and meters to test and monitor electrical and electronic processes. |
| | | | Prepare and-or use electrical drawings to design, install and troubleshoot control systems. |
| | | | Use geospatial technologies in agricultural applications. |

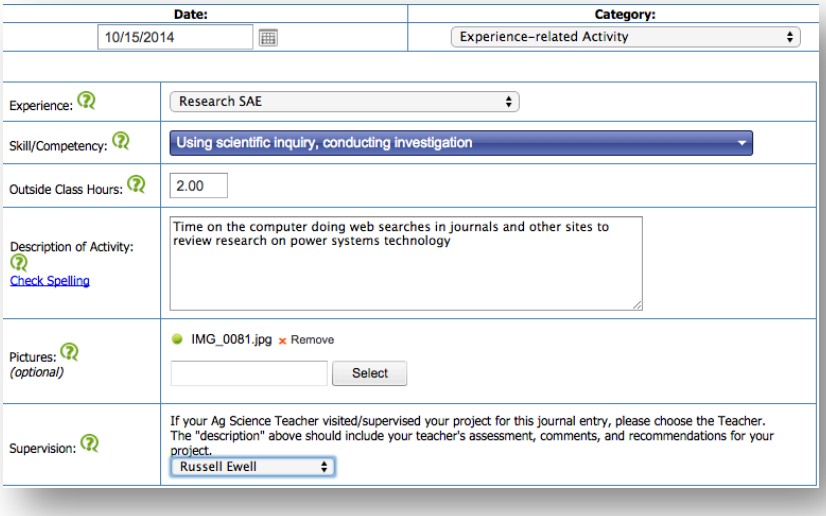
Click "Expore this Category" to learn more about the area and suggested activities for time invested. Once you begin to make journal entries, you will choose from these common areas as well as other categories related to the time invested in your project.

## Step 2: Recording Time in Your AET Experience (SAE)

All SAE projects require time. Select the JOURNAL tab to enter your invested time and identify common activities across the dates of your experience.

The steps are:

2.1 Select appropriate date
2.2 Choose your project
*2.3* Choose an activity *(See step 2.3 below)*
2.4 Enter hours related to the date and activity
2.5 Enter a detailed description of your effort
2.6 Add a picture
2.7 Identify how your teacher assisted



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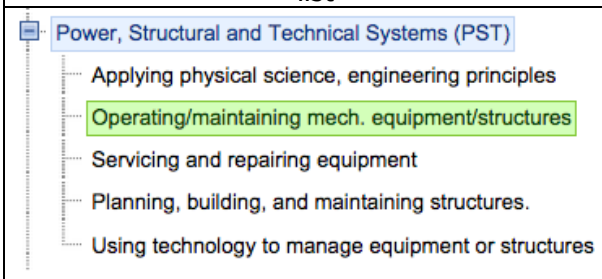
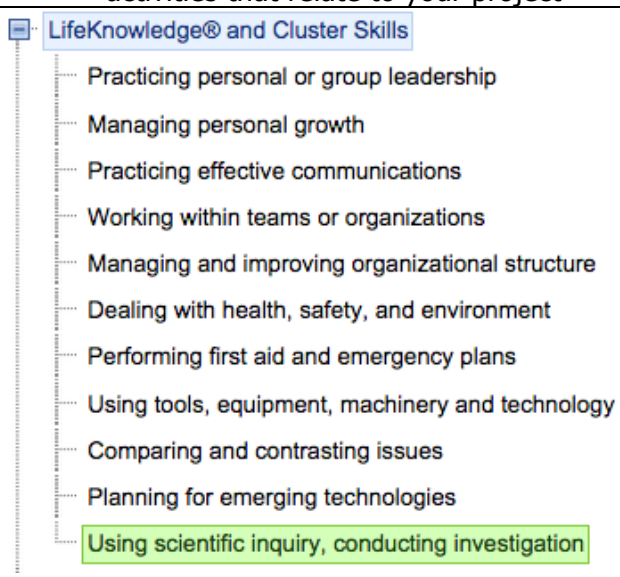
## Significance of Step 2.3 - Choose the right activity (Skill/Competency)

Based on your AET Experience Category (SAE), your list of activities will open options. For example, a Power Systems research project (such as testing hydrolic power at different RPMs) will expand activities such as:

| **Idea 1:** Select from the standard category list | **Idea 2:** Explore other categories to find additional activities that relate to your project |
|---|---|
|  <br>*This is the category selected, and our research potentially involves learning about setting up the study, which involves:*<br><br>*"Operating/maintaining mech. equipment"* |  <br>*Life Knowledge and Cluster Skills include common areas related to many projects, and in this case likely involves reviewing other research and ideas to setup the study:*<br><br>*"Using scientific inquiry, conducting an investigation"* |

## Significance of Step 2.1 and 2.4 - Enter the date and hours invested

Documenting time invested is the foundation of an AET Journal and should be recorded as frequently as possible. Try connecting your time invested to common activities, which illustrate the educational aspect of your experience.

| Date | AET Exp. | Activity (list) | Hrs | Description |
|---|---|---|---|---|
| 9/1 | Research | Operating/maintaining | 2 | Reviewed operating procedures with… |
| 9/5 | Research | Using Scientific… | 2 | Reviewed power system research journals… |
| *9/15* | *Research* | *…continue to add* | *Hrs.* | *Develop descriptions in your own words…* |