

Situation: *You are a student who is interested in tractor restoration and invests time and money to restore a tractor(s) for your SAE. You plan to sell the tractor(s) to make a profit. You have a restoration business.*

SAE SETUP



Step 1 Set Up the SAE - PROFILE Tab

- Select "Experience Manager" and "Add a New"
- Enter your SAE name., typically the name of your business
- Select level of focus, typically individual, and SAE type
- Choose the primary area of Power, Structural and Technical Systems, then Repair/Maintenance as subcategory
- In "unit," add "Tractors" or "Clients" or some other measure to track growth
- Hit "Save" (see box to your right for details)




Name: Tractor Restoration Business
Level: Individual
Type: Entrepreneurship
Area: Power, Structural, & Technical Systems
Unit: #Tractors or #Clients

NOTE: *If the student is restoring tractors as a hobby for their own inventory, USE Area: Power, Structural and Technical Systems, and Repair/Maintenance. If the student is restoring tractors as a business, USE Area: Agribusiness and Service.*



Step 2 Develop Your SAE Plan - Experience Manager

- Click  to complete each of the 5 tabs using the help in the header box of each section
- Description Tab - Include project duration, size and kind, goals, evaluation, or mentor
- Time Tab - Include time required for tractor breakdown, repair, managing parts for replacement, paint, and ordering, or other common activities (hours per week)
- Financial Tab - Include for repair, with income estimates for the restoration services or sales of finished products (record cash, noncash, or gifts in resources for the restoration)
- Learning Objectives Tab - Click + Add Skills (select any 3 as a minimum requirement):



- FND.A1.05 - Developing an SAE plan
- ABS.01.01 - Apply micro and macroeconomic principles to plan and manage inputs/outputs in an AFNR business
- PST.03.01 Troubleshoot, service, and repair components of internal combustion engines using manufacturer's guidelines

Once 3 skills are selected, add a brief description of related activities that may occur in your project related to each learning outcome



Step 3 Create a Budget for Your Business

- Enter estimated annual income(s) for 1 tractor/client during the SAE
- Enter estimated yearly expenses for 1 tractor/client endured in the SAE
- Use the Memo to show calculations or rationale for the estimate
- Non-cash income and all non-cash expenses should be equal



Step 4 Enter Beginning Values - FINANCES Tab (SAE items on/before 1st day in Ag)

Select Blue Box - "Start of Ag Ed Inventory" ****USE:** *Beginning Inventory Worksheet.*

Tractor Restoration SAE Guide

Entrepreneurship - Business

- Current Items Tab - Consumable supplies (paints, lubricants, oils, etc...)
- Non-Current Items Tab - Depreciable equipment (tools, stationary shop tools, etc.)
- **List only Non-Current items owned by the student (items not owned = use Custom Hire)*
- Liabilities Tab - Existing loans for your SAE project
- Cash/Checking Tab - Cash/savings account value before 1st day of Ag available for cash expenses in your SAE

SAE FINANCIALS

Step 5 Record SAE Related Expenses - FINANCES Tab



A. Cash Entries - SAE Cash Expenses

- These are your cash expense records for the SAE
- Record date, vendor, SAE and type of expense
- Examples are supplies, rent, repair, other....



B. Non-Cash Entries - SAE Labor Exchange

- Choose SAE for income and expense to show trade of labor value (memo) for the expense and the quantity of purchase (memo)
- Record date, vendor, value of exchanged labor/expense
- "Save and Journal" your time spent (labor) for the money of the labor exchange expense
- Other Non-cash could be gifts of supplies or non-sae trade, which is your labor such as babysitting for supplies.

NOTE: *A business pathway SAE restoration will have no purchase of a tractor, while a power systems pathway SAE will have a tractor purchase as "Other" as it will become current inventory (unfinished) on 12/31*



Cash Expenses

9/2/24 – Plastic Storage containers - \$85
9/2/24 – Deere decals - \$140

Non-Cash Expenses

12/30/24 – Labor exchange \$1000 shop and tool rent for the year. In exchange, I mow at home for the season @ \$10/hr.



Step 6 Record SAE Related Income - FINANCES Tab

- Choose Cash Entries, then ENTER Cash Income
- Use Product/Service Sales for business SAE (or most appropriate from dropdown)
- Can include "Other Income/Premium" if awarded in restoration contests
- Enter date, experience, vendor, dollar amount, #/qty of service



Cash Income

12/1/24 – Product/Service Sales: Bryant Farms - Model G Complete restoration \$5500



Step 7 Record and Manage Non-Current Items - FINANCES Tab

- Choose "Add New" for items purchased during the SAE beyond 1st day of Ag (tools) SEE Usage Tip.
- Record "Usage" for each item to link it to SAE(s) for depreciation
- If you sell non-current items, choose "Sell" and complete the page

NOTE: *A tractor purchased for restoration should not be purchased as a non-current purchase since it is at its lowest value at acquisition and will increase in value upon completion of the restoration*



Usage Tip

Your usage of a Deere Hand Clutch Pivot Pin Tool can quickly be done by "double click" to put 100% in the SAE

SAE REFLECTION



Step 8 Record Your SAE Time - JOURNAL Tab

- Use the mobile version or desktop to journal your time
- Enter the date, choose your SAE and related skill area
- Enter the amount of time in your SAE (hour/minutes)



Time

On 9/11/24 – 3 hrs. 30 min:
Remove large external structures label, spray bolts/nuts.

Tractor Restoration SAE Guide

Entrepreneurship - Business

- The description should include decisions and outcomes



Step 9 Capture SAE Photos - JOURNAL Tab/Portfolio

- Use your phone to capture photos and upload them directly using m.theaet.com
- Add captions to tie to SAE reports and in the FFA Awards transition
- Also, you can access and add files in your Experience Manager - Files/Videos



Step 10 SAE Reflection – SAE Manager

- Annual Summary – describe (1) your SAE duration and kind (2) SAE size/scope (tractors/clients) (3) key outcomes of the year.
- ADD Efficiency Factor - enter measure and discuss the management or performance seen in the SAE

EX: Identify Parts of the Deere Model G Tractor

Level: Novice - Only identify major parts

Description: Discuss the parts and the role identification takes in the restoration process



- Enter any supplies on hand that have value, and you can measure using "+ New Asset"
- EX: Fuel, fluids (Enter quantity, value, description)

NOTE: Business - Add consumable supplies only on hand that were purchased during the SAE but not fully used.



Power Systems - Add unfinished tractor at the value of purchase + expenses



- Review/enter non-current usage for all items
 - Learning Activities - Describe learning activities that support the planned skill in the SAE
- *These will become available in the award app as Skills/Knowledge



Step 11 Determine Project Status - SAE Manager

- In most cases, your business will be ongoing and remain active (green)
- If a power systems SAE and tractor is finished, turn SAE inactive (grey)



Step 12 Key SAE Reports - REPORTS Tab

- "Single SAE Experience Report" - summarizes THIS SAE project in one report
- "Profit/Loss Report" - summarizes annual income and expenses
- "Complete Record Book Report" - summarizes all of your records into one report



2024: Annual Review Example – Qty 15

I started my "Old Timer" Restoration SAE in September of this year by purchasing a Deere Model F for \$1800. I spent 106 hours so far breaking down the entire tractor to the frame, I gained skills in research, organization, part ID, and patience as I have learned to disassemble a piece of history while learning how to label, store and restore parts while making purchase decisions for new parts. CLOSING INVENTORY: \$1800 Deere Model G, \$250 Deere Decals and Seat