

# PROJECTS Simplified!

## Step 1 Proposal and Logbook

Have each student setup a logbook to document everything they do for the project. A composition notebook works well since pages can't be removed easily. It can easily start with a timeline with one-line actions with the date. A few pages later they can start longer entries with one page for each day unless it is a chart of data. (I used the left pages for comments and students only wrote on the right pages.)

Students develop a proposal which gives a question they might want to investigate, brief outline of an experiment. (I suggested they look at their own life, their family, and possibly the career they might want to pursue to develop ideas. I often suggested 3 proposals to allow options.)

## Step 2 Adult Sponsor Review

Look over the proposal(s) and comment on the feasibility, considering the materials needed, time commitment, and additional support that would be needed for each.

## Step 3 NEFRSEF Registration

Work with the student to help them register and develop a working title for the project. It can be changed later. Complete Form 1 Adult Sponsor Checklist by marking the appropriate boxes so the forms and sections of the Research Plan will display for the student.

## Step 4 Student develops Research Plan

Assign the student to read the ISEF Rules and SSEF Supplement relevant to the project. Find references related to the project to help write the rationale and hypothesis. The student should write out materials list and numbered steps giving the procedure.

## Step 5 Adult Sponsor Review

Guide student making suggestions and/or editing the Research Plan until it is complete. (My students usually took at least three attempts where I would finally edit it so I could sign Form 1. PLEASE let me help you with this process, if the information is on the NEFRSEF website you only need to let me know the student's name and I can look over it.) Once the Research Plan is adequate complete the other forms on the NEFRSEF site except for the Abstract which is done after the experiment.

Projects involving the following require additional references and Committee Review:

1. Human Participants require your school's Institutional Review Board (IRB) approval before any contact with participants. (Because of previous difficulties with these projects, please contact NEFRSEF SRC to review before the IRB to

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make sure that all aspects of the paperwork are ready for the IRB. ALSO be very sure the IRB is properly constituted so there are no conflicts of interest.

2. Vertebrate animals, microorganisms, tissue, hazardous chemicals, activities or devices require SRC approval by the NEFRSEF committee. PLEASE send the names of paperwork to review BEFORE attending a Tuesday afternoon in-person session. SRC approval can be completed virtually but it is often easier to talk about some concerns.

### **Step 6 Printing and Signing the Forms**

Once the project is reviewed by the Adult Sponsor the forms should be printed and signed by the student and guardian on Form 1B and the Adult Sponsor on Form 1. If required, additional forms must be printed and signed with the IRB or SRC signing on Form 1B in box 2a designating approval by the committee.

### **Step 7 Experimentation**

Adult sponsor monitors the student during the experiment. If a change in the procedure is required there are three options depending on the project and the revisions:

1. Addendum to the research plan PRIOR to instituting the change and obtaining a complete set of signatures on the Addendum.
2. Revise the current research plan and change the review date on Form 1.
3. Write a Summary after the experiment stating the changes.

(Please let me help determine which is appropriate.)

### **Step 8 Finalizing project**

Student prepares graphs, presentation board and writes the SSEF abstract. It is great when the student can present their project to the class and/or judges. All signed paperwork and the Research Plan will need to be submitted.