PROJECT PLANS, IDEAS, AND ABSTRACTS

This session will discuss how to select a project, what makes a project creative, and how to summarize your project in an abstract.

Pick a Topic

The first step is to pick a topic that has value and significance.

Obviously this should be something that you are excited about. Unless you're enthusiastic about the work, it will be just a chore and you won't put your heart into it.

The topic should have some scientific value. That is, it should try to shed light on a legitimate problem or question.

It helps if a topic is timely yet not one that has been "beaten to death." This can create dilemma but sometimes a novel approach to a familiar problem gets around this paradox.

Then there are the practical questions.

Is this a project you can carry out? Is it within your skills and resources, and can you get hold of the necessary facilities and equipment?

It helps to have a teacher or mentor who understands the project. In a few instances students have teamed up with a professional researcher but have still done work that can be identified as independent.

Finally, is the project "legal?" That is, does it meet ISEF Rules? This is especially relevant in life sciences where there are human or animal subjects, or where there are safety concerns. Read the rules first; it would be a shame to invest in a project only to have it disqualified.

There are sources one may consult for inspiration.

Read the semi-popular magazines like Science News and Scientific American.

For many years Scientific American ran a column called "The Amateur Scientist." Sadly they dropped it a few years ago, but a compilation is now available on CD. You can order it on-line from Amazon and other sources.

Use your local library.

Of course the Internet is a great source but beware of the junk you may encounter. Stick to reliable sites.

Prepare a Plan

Write up your plans, including some "forks in the road." That is, "I'll try this approach first but if it doesn't work then I will try these alternatives."

Think through your plan and discuss it with teachers and advisors. Make sure it's something you can do. If there are obstacles or problems, such as access to special equipment, find out whether you can get past them. If not, you may have to revise your plan

Estimate the time and resources you will need. Be conservative; it NEVER goes as smoothly as you anticipate.

If your project may require Safety, Human Subject, or other approvals read the rules and download the necessary forms. Get them signed off early. It would be a shame to work hard on a project only to find out at the end that you can't enter it in the Fair.

Abstracts

An abstract is a short summary of your project. It is typically 1/4 to 1/2 of a typewritten page. It should state the question or hypothesis you investigated, the general method you used, and what you concluded or accomplished. You will post your abstract on your display board, and possibly make handout copies available to judges and others who are interested.

Keep the abstract concise, logical, and to-the-point. And please make sure your spelling and grammar are perfect.