

HOW TO DEVELOP A SCIENCE FAIR: HELPING YOUR STUDENTS

- **SELECTING PROJECTS**

- **Identify that students are unique individuals with different aptitudes.**
- **Try to identify what is interesting to the student.**
- **Prompt the student, once an interest is found, with a question like, “What is a societal issue in this area?”**
- **Encourage the student to develop an independent inquiry of something pertaining to the societal issue.**
 - **IT DOES NOT HAVE TO SOLVE THE PROBLEM, NOR SHOULD IT BE EXPECTED TO, BUT IT SHOULD ADDRESS ONE.**
- **Insure that the project is doable. Many times unsuccessful inquiries are simply topics that are not easily testable or extremely expensive to test.**
- **Encourage students to notice what is of interest currently. (i.e. biofuels, alternative energy, global climate change, etc.)**
- **Is the project idea unique?**
 - **Construction of a hovercraft has been done many, many times.**
 - **Baking soda and vinegar volcanoes are not unique.**
 - **Rate of bread molding is not a pressing current topic of interest to most.**
- **Select a project that will allow for a number of replications for statistical validity.**
 - **One replicate does not give enough information to draw a conclusion upon.**
 - **Three replicates is minimal number for statistical validity.**
 - **Five, or more, replicates are better.**
- **Select a project that is not too expensive to conduct.**
 - **Nice work can be completed with low cost if the student is wise in the topic selected.**
- **Select a project that is age appropriate.**