Types of Science Fair Projects

The judging of scientific thought requires special attention. One important consideration is the existence of different **types** of projects. The most common types of science fair projects are **Experiments**, **Studies** and **Innovations**; some projects will contain elements of two or three project types. Projects of each type are equally capable of winning top awards at the Fair, providing they meet the necessary criteria.

An Experiment

This is traditionally the most common type of science fair project in the life or physical sciences divisions. Projects of this type involves an original scientific experiment to test a specific hypothesis in which the student recognizes and controls all significant competing variables and demonstrates excellent collection, analysis, and presentation of data. The judge should also realize that it is not essential that the project produce a significant positive finding. It is the design rather than the results that is most important.

A Study

This type of project involves the collection and analysis of data from other sources to reveal evidence of a fact, situation or pattern of scientific interest. This could include a study of cause and effect relationships or theoretical investigations of scientific data. The data may be obtained from other sources rather than being collected by the student. Projects in this area must be able to demonstrate that the methods originally used to obtain the data are based on sound scientific techniques and controls and demonstrate insightful analysis.

An Innovation

A project of this type would involve the development and evaluation of new devices, models, techniques or approaches in fields such as technology, engineering or computers (both software and hardware). Projects should integrate several technologies, inventions or designs and construct an original innovative technological system that will have commercial application and/or human benefit. It must demonstrate how the innovation was designed or developed on the basis of a sound understanding of the scientific, engineering or technological principles involved.

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