The Judging Interview

A Science and Engineering Fair is both a competition and a valuable opportunity to nurture future scientists by giving them your undivided attention, asking incisive questions and providing positive feedback. As judges you will have an opportunity to study the student's projects during the judge's preview session on Monday evening, but the most important part of the judging is your interview with the students during the day on Tuesday.

1. **Before you start:**
    - Introduce yourself to the student.
    - Encourage the student to shake your hand.
    - Sit in a chair to have your eye contact at the student's level or below. Many of our students are quite small and feel intimidated by having to look up at their judges during their interview.

2. **Ask students to summarize their projects.**
    - These explanations serve as verbal abstracts, proving a general overview of the projects.
    - The students should:
        - Specify the source of their ideas
        - Clarify both the problem addressed and the basis for their hypotheses
        - Define the controlled and variable factors involved
        - Explain the procedures used to answer their questions
        - Detail how their data was collected and analyzed and summarize their findings and explain their relevance
    - If a student has worked on a project for more than one year, he/she should summarize the previous work before concentrating on the current year's research
    - If a student uses unfamiliar jargon without clarifying it, ask for a "translation".

3. **Request additional information on:**
    - Background research.
    - Materials and mentoring provided.
    - Information on the backboard (e.g., a request to clarify a graph or table)
    - Projected continuation of the project.

4. **Judges should look for sound evidence of:**

- knowledge gained.
- scientific method.
- creativity.
- primary experimental research.
- individual work.
- thoroughness.
- validity of conclusions.
- quality of written presentation.
- quality of visual presentation.

5. Judges should look for sound evidence of:

- What is the most important thing you want me to know about your project?
- What is the main message of your project?
- How did you get this idea?
- What was the most interesting background reading you did?
- Which are your control factors? Your variables?
- What is/are the difference(s) between your control experimental groups(s)?
- Where did you get you animals (bacteria, plants, etc.)?
- What skills did you acquire to do this project?
- What help did you receive from others?
  (It's O.K. for the student to have help, especially Juniors.
  Make sure student understands what was done and why.)
- How many times did you repeat this experiments and what changes, if any, did you make?
- Why did you choose the statistical test used and what do your results mean?
- Explain this graph (diagram, chart) to me.
- How can you be sure your experiment supports your conclusion?
- What does this (some project detail) mean?
- What surprised you most about this experiment?
- What is the most important thing you found out in doing this experiment?
- What changes would you make if you continued this project next year?
- What application does this project have to your/my life?
- Is this a continuation of an earlier year's project and has a full year's work been added to that done previously?
- How does this experiment conform to the scientific method?
- What experimental errors are in your project and how did you correct for them?
- How did you determine the sample size to be used?

- Explain your procedure to me.
- How does your project differ from others you researched?
- Where was your project done?
- Are there any questions you would like to work on for next year?

6. **Of Special Importance**
    - Remember to compliment students on work done and encourage them to expand their research interests.

NOTE: Personal questions, e.g., about the students' backgrounds, home life or school attended, must be avoided. Please remember that some students may be shy or speak English as a second language. While skill in making oral presentation is part of what you are evaluating, your final score should be based primarily on creativity, scientific or engineering goals, thoroughness and skill and clarity as demonstrated in the finished paper and on the backboard.