

Judging Guidelines SLCharter Schools Science Fair

Where to start:

1:00-2:00 Convene in Judges' Room to eat lunch and review scoring rubric and judging process

2:00-2:30 Preview boards and reports (no student scientists). *This will help minimize the need for rescoring later and is a great opportunity to identify some key questions for the interview.*

2:30-4:15 Student interviews:

Spent 10 minutes evaluating each project & visiting with student scientists. *Revisit projects if necessary.*

When time allows, consider visiting projects to which you were not assigned.

**At anytime during the student interviews, feel free to visit the judging room/area to tally scores and/or speak with other judges about the projects. Please avoid discussing scoring while on the floor.*

Judges wear many hats: Professional authority, evaluator, critic, mentor...**first & foremost, judges should be validating the experience for student scientists**

Tips for meeting with student investigators:

- Encourage students. Be kind with comments...try to recall being a pre-teen/teen... (Students are 10-18 years old)
- Ask about the project (where did the idea come from, methodology, related research)
- Engage in discussions about "future investigation" or "improvements" (make suggestions)
- State things that you like (idea, display, graphs, enthusiasm, general knowledge, etc.)
- Never appear bored
- Do not evaluate or tally scores in student's presence
- Do not compare projects or refer to other projects aloud while on the project floor with students

Some suggestions for addressing students:

- I liked...
- I recommend...
- Have you considered or heard of...
- A technique I have used (or am familiar with)...
- I noticed...
- I enjoyed...
- If you repeated or continued this study would you make any changes?

What to look for:

- Students should be able to think on their feet and not be limited to scripted-style discussions of their project.
- Evidence for theoretical work
- Consider how much time was spent on the project
- Ask questions or look for evidence of planning and experimental design
- Look at the amount and quality of the data...adequate to address hypotheses?
Sample size, single experiment or repeated...
- Do the conclusions relate to the hypothesis and research plan?
- Familiarity with topic and other related research...
- Does the presentation reflect student understanding of the research process & what was learned?
- Do the investigators understand the data/results displayed on their poster?
- Team projects: look for freeloaders. However, it is okay & expected that students will have divided some tasks

Expectations for Students			
	Elementary (5-6)	Junior High (7-8)	High School (9-12)
Question/Methods	Have a simple question with a simple experiment or design	Simple experiment and completely understands how the experiment or design helps to answer the question	More complex question and experimentation than junior high student, but should still have complete understanding of the methodology they are using. Most students will be doing original research.
Research	Have done some background research and be able to refer to that research	Can refer to sources used for research; may have knowledge of academic writing	Can refer to background research and should have access to academic journals/articles.
Process	Elementary students should understand simple variables and how they affected the experiment	Should have some understanding of variables and how to control for variables. Procedures are clear and the student is able to relay what they did and what went wrong or right, and why.	Well-designed experiment that includes replicates or significant sample sizes. Procedures are clearly stated and student understands why he/she has used the methods involved. Understand variables and use them in his/her experimental design.
Analysis	Have written data from experimentation and provide simple calculations and graphs/tables	Tables and graphs should be used to present data. Student should be able to talk about why they used those calculations to present his/her data.	Students will have tables and graphs that clearly represent the data. Tests and numerical analysis should be present (e.g. mean, standard deviation, t-tests, etc.). Students should be able to answer questions about his/her data.