

NHSEE Judging Criteria for Science Projects

Project Title & Entry #:		
No Evidence: Does not meet the criteria.		No Evidence = 0
Emerging: Understands basic concepts but cannot elaborate.		Emerging = 1
Proficient: Fully meets requirements of the criterium.		Proficient = 2
Advanced: Exceeds expectations, and can provide high-level detail for that criterium.		Advanced = 3
Instructions: For each numbered criterium, enter a score of 0, 1, 2 or 3 based on definitions above.		
Criteria		Score
I. Research Question	9 Points	
1. Asked a clear, specific, measurable, cause and effect question requiring experimentation.		
2. Clear and specific hypothesis identifying independent and dependent variables.		
3. Identified contribution to field of study.		
II. Design & Methodology	15 Points	
4. Demonstrated knowledge of scientific method.		
5. Clearly identified and explained key scientific concepts relating to the experiment.		
6. Developed appropriate procedures for testing hypothesis, including use of control variables.		
7. Research method(s) are aligned with research question and hypothesis.		
8. Accurate experimental techniques.		
III. Execution: Data Collection, Analysis and Interpretation	21 Points	
9. Clear and thorough processes for data collection and observation.		
10. Ran sufficient trials to determine answer to question, including assessment of variables to be considered. (Scoring: 0 = No Trials; 1 = 1-2 Trials; 2 = 3 Trials; 3 = 4 or more Trials).		
11. Well-documented and complete logbook present that contains dates, times, places of experimentation, observations, materials, methods, procedures, data, references and thoughts.		
12. Reproducibility of results.		
13. Appropriate application of mathematical and statistical methods.		
14. Data collected supports interpretation and conclusions		
15. Conclusions relate back to hypothesis.		
IV. Creativity	12 Points	
16. Original topic, a new area of research or a new perspective on existing research.		
17. Design and approach to the project is unique.		
18. Methodology selected to answer research question is innovative.		
19. Creative suggestions for changes to the experimental procedure and/or possibilities for further study.		
	Subtotal Page 1:	
Comments/Notes:		

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V. Presentation	39 Points	
Poster	12 Points	
20. Neat, well-organized, visually appealing, and is readable at ~2 feet distance.		
21. Flows logically from question to experiment to conclusion.		
22. Includes key components of the scientific method.		
23. Pictures, diagrams, charts, and graphs intuitively and effectively convey information about the project.		
Interview	27 Points	
24. Student interview logically followed the scientific method while presenting.		
25. Student engaged with judges, using the poster as a visual aid.		
26. Student was enthusiastic about their project.		
27. Provided clear, concise, thoughtful responses to questions.		
28. Understood the science relevant to the project.		
29. Understood the interpretation and limitations of results and conclusions.		
30. The degree of independence of which the student conducted the project.		
31. Recognition of potential impact to science, society, and/or economics.		
32. Quality of ideas for future research.		
Abstract	4 Points	
33. Project abstract contains all required parts (see below). (Scoring: 4 Points if meets criteria, 0 if not).		
	Subtotal Page 2:	
	Subtotal Page 1:	
	Total:	
Comments/Notes:		
Total Score: ____/100		

Parts of a Science Project Abstract

Starts with an **introductory statement** about why the student is doing the project.

What is the student trying to discover and why readers should care. Then, the student states their **question/problem** and their **hypothesis**. Next, the student should summarize their **methods**, including key points of their **procedures**.

Then the student should give the highlights of their **data** and **data analysis**, followed by their **conclusion**.

The last part of the abstract should discuss the applications and implications of their project and research.