

What Students Should Aim For When Being Judged at the Quinte Regional Science & Technology Fair

1. Understanding of the Project

Judges look for whether the student truly *understands* their work.

- Can they explain their question or problem clearly?
- Do they understand the science behind their topic?
- Can they describe what they did and *why* they did it?
- Do they show ownership (not a parent-built project)?

Tip for students: Explain your project as if you're teaching someone new. Avoid memorized scripts.

2. Scientific Thought or Engineering Design

Depending on the project type:

Scientific Inquiry

- Clear hypothesis or research question
- Logical experiment design
- Controlled variables
- Accurate data collection
- Evidence-based conclusions

Engineering / Innovation

- Clear problem definition
- Brainstorming and design alternatives
- Prototyping and testing
- Iteration and improvement
- Practicality and creativity of the solution



Tip: Judges love seeing *iterations*, even if early versions failed.

3. Creativity & Originality

Students don't need a brand-new invention—just something that shows their own thinking.

- A new twist on a known idea
- A creative method or approach
- A unique question inspired by real life

Tip: Explain *why* you chose this project. Personal motivation matters.

4. Quality of Data & Analysis

2027

Quinte Regional Science and Technology Fair

Expo-sciences régionale de Quinte



Judges look for:

- Enough data to support conclusions
- Honest reporting (including mistakes)
- Graphs, charts, or tables that make sense
- Clear explanation of what the results mean

Tip: If results didn't match the hypothesis, that's still good science. Explain *why*.

5. Communication Skills

This is a major scoring area.

- Clear, confident verbal explanation
- Ability to answer questions thoughtfully
- Organized project board
- Logical flow from question → method → results → conclusion

Tip: Practice explaining your project in **2 minutes**, then in **5 minutes**.

6. Display & Organization

Judges don't score "prettiness," but they *do* score clarity.

- Easy-to-read headings
- Clean layout
- Photos of the process
- Graphs that are labelled
- No clutter or tiny text

Tip: Your board should tell the story even when you're not standing there.

7. Safety & Ethics

Judges check:

- Safe experimental procedures
- Proper handling of chemicals, tools, or biological materials
- Ethical treatment of animals
- No dangerous or prohibited materials

Tip: If safety rules affected your design, mention it. Judges appreciate responsible choices.

8. Effort, Perseverance & Learning

Judges value:

- Time invested
- Challenges overcome
- What the student learned
- How the project changed from start to finish



2027

Quinte Regional Science and Technology Fair Expo-sciences régionale de Quinte



Tip: A project journal—even a simple notebook—impresses judges.

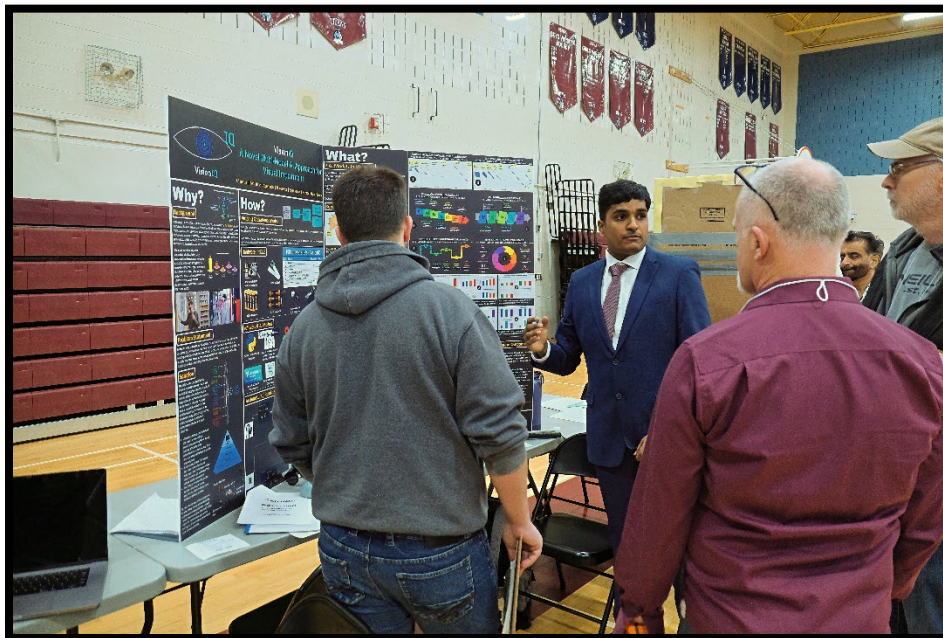
What Impresses Judges Most

- Students who are genuinely excited about their topic
- Students who can explain *why* their project matters
- Students who show curiosity, not perfection
- Students who think independently and reflect on mistakes
- Students who connect their project to real-world problems

Ready-to-Use Student Checklist

Before the fair, ask yourself:

- Can I explain my project clearly?
- Do I understand the science or engineering behind it?
- Did I collect real data and analyze it honestly?
- Does my display tell the story?
- Can I answer questions without memorizing?
- Did I show creativity or original thinking?
- Did I follow all safety rules?
- Can I describe what I learned and what I'd improve next time?



2027

Quinte Regional Science and Technology Fair

Expo-sciences régionale de Quinte



Project Judging Rubric

Quinte Regional Science and Technology Fair

Use this rubric to assign a level (1,2,3 or 4) against the criteria for the project. Then choose a mark within the range provided for that level. This mark reflects the quality and strength of the project relative to other projects you have assigned the same level.

Part A: Scientific Thought Mark: ____ / 50	
Discovery: An experiment or study	Innovation: Develop devices, models or techniques
Level 1 Mark Range 26 to 30 (least impressive)	
Replicate a known experiment to confirm previous findings or collate data from a variety of sources without further analysis.	Build models (devices) to duplicate existing technology or to demonstrate a well known physical theory or social/behavioural intervention.
Level 2 Mark Range 31 to 35	
Extend a known experiment with modest improvements to procedures, data gathering or application; or synthesize data from a variety of sources to confirm existing conclusions. Attempts to address a specific issue.	Improve or demonstrate new applications for existing technological systems, social or behavioural interventions, existing physical theories or equipment, and justify them.
Level 3 Mark Range 36 to 41	
Devise and carry out an original experiment. Identify and control some of the significant variables or synthesize data from a variety of sources to strengthen or extend existing conclusions. Carry out an analysis using arithmetic, graphs or simple statistics.	Design and build innovative technology or provide adaptations to existing technology or to social or behavioural interventions; extend or create new physical theory. Human benefit, advancement of knowledge and/or economic applications should be evident.
Level 4 Mark Range 42 to 50. (most impressive)	
Devise and carry out original experimental research which attempts to control or investigate most significant variables. Data analysis is thorough and complete for the grade level. There is internal consistency – all parts of the report address the purpose. Results are related to real world significance. Further studies are suggested.	Integrate several technologies, inventions or designs and construct an innovative application that will have human and/or commercial benefit. Performance of the prototype or procedure is thoroughly evaluated. Suggestions for improvement are made. Relevance and significance of the work is explained.

Part B: Creativity and Originality Mark: ____ / 20			
Level 1 (9 to 11)	Level 2 (12 to 14)	Level 3 (14 to 16)	Level 4 (17 to 20)
Simple design with little student input. A textbook /internet type project.	Some creativity in a project of fair to good design. Topic is a common one.	Imaginative project, well thought out. Some creativity in design or use of materials.	Highly original approach, showing much resourcefulness and creativity in design, use of equipment, or analysis.

Part C: Communication Mark: ____ / 30			
The level is based on four elements: summary, interview, project display board and sample logbook pages.			
Level 1 (15 to 17)	Level 2 (18 to 20)	Level 3 (21 to 24)	Level 4 (25 to 30)
Most or all of the four elements are simple or incomplete. There is little evidence of attention to effective communication. In a pair project, one member may have dominated the presentation.	Some of the four elements are simple, or incomplete, but there is evidence of student attention to communication. In a pair project, one member may have made a stronger contribution to the presentation.	All four elements are complete and demonstrate attention to detail. The communication components are each well thought out and executed. In a pair project, both members made an equitable contribution to the presentation.	All 4 elements are complete and exceed age/grade expectations. The visual displays are logical and well presented. The summary and logbook are informative and clearly written. The bibliography goes beyond web-based articles. The oral presentation is clear, logical, enthusiastic and contributed to equally in a pair project.

Total Mark: ____ /100 March 2025

Enter Marks in the Result Summary sheet. Determine ranks. Submit the sheet to the committee room.
These forms are not to be given to students. Provide the *Project Feedback* form to each student.

