TEACH2LEARN

PROJECT JUDGING: A STUDENT PERSPECTIVE

SEFH SCIENCE FAIR SEMINAR

TEACH2LEARN

What do we do?

- Host STEM Workshops at local middle schools
  - Science Fair
  - Computer Science
  - Destination Imagination
- Inspire curiosity in STEM
- Foster intellectual growth

HOW DOES JUDGING WORK?

School/District Fairs

- Judges are generally teachers & parent volunteers

Regional Fairs (SEFH)

- Judges are often volunteers with related expertise in project category
- 2 judging phases
- 1 special award judging phase
- First places in each advance to Grand Award judging phase
    - Both junior & senior divisions

HOW DOES JUDGING WORK?

TXSEF

- Special award judges have access to video presentation, board, and abstract before competition
- First places in each category advance to Blue Ribbon judging phase
    - Both junior and senior divisions

HOW DOES JUDGING WORK?

ISEF

- High school projects only
- 22 project categories, subcategories within each
- 6-13 place award judges per project
- 10-12 minute interviews
    - More particular about timing than TXSEF/SEFH
- Judges have **20 seconds** to nominate a project during placing decisions followed by **2 minutes** of discussion

HOW DOES JUDGING WORK?

Judges at every level grade according to a rubric!

However, place awards are often settled through **debate among judges**

Therefore, a good presentation must…

- Abide by the rubric
- Connect with judges
  - Judges must UNDERSTAND you and BELIEVE IN you
  - **Why is your project important?**

GET THE POINT ACROSS

Presentations can make or break your project

Bad presenting can cloud your discovery/invention

Common mistakes

- Using too much technical jargon
- Speaking too softly
- Speaking too quickly
- Lacking tonal inflection
- Too little emphasis on project applications

FORMAT GUIDELINES

Students should be prepared to explain their project given varying amounts of time

1 MINUTE

0:00–0:10	Problem
0:11–0:20	Goals/ Hypothesis
0:21–0:30	Methods
0:31–0:45	Results
0:45–1:00	Conclusion Applications

3 MINUTE

0:00–0:45	Literature Review Problem
0:46–1:00	Goals/ Hypothesis
1:01–1:30	Methods
1:31–2:00	Results
2:01–2:30	Discussion
2:31–3:00	Applications Future Directions Conclusions

5 MINUTE

0:00–1:15	Literature Review Problem
1:16–1:30	Goals/ Hypothesis
1:31–2:00	Methods
2:01–3:00	Results
3:01–4:00	Discussion
4:01–5:00	Applications Future Directions Conclusions

LISTEN TO THESE SAMPLE PRESENTATIONS

MAKE NOTES OF WHAT IS DONE WELL AND WHAT IS DONE NOT SO WELL

PRESENTATION A

DESIGNING THE BEST SOLAR COOKER

How many points would you award...

I. Research Problem (10 pts)

II. Design and Methodology (15 pts)

III. Execution: Construction and Testing (20 pts)

IV. Creativity and Potential Impact (20 pts)

V. Presentation (35 pts)

ISEF Rubric for Engineering Projects

PRESENTATION B

DESIGNING THE BEST SOLAR COOKER

How many points would you award...

I. Research Problem (10 pts)

II. Design and Methodology (15 pts)

III. Execution: Construction and Testing (20 pts)

IV. Creativity and Potential Impact (20 pts)

V. Presentation (35 pts)

ISEF Rubric for Engineering Projects

PRESENTATION A

HOW DOES PH AFFECT PLANT GROWTH?

How many points would you award...

I. Research Question (10 pts)

II. Design and Methodology (15 pts)

III. Execution: Data Collection, Analysis & Interpretation (20 pts)

IV. Creativity and Potential Impact (20 pts)

V. Presentation (35 pts)

ISEF Rubric for Engineering Projects

PRESENTATION B

HOW DOES PH AFFECT PLANT GROWTH?

How many points would you award...

I. Research Question (10 pts)

II. Design and Methodology (15 pts)

III. Execution: Data Collection, Analysis & Interpretation (20 pts)

IV. Creativity and Potential Impact (20 pts)

V. Presentation (35 pts)

ISEF Rubric for Engineering Projects

ARE YOU STILL WITH US?

- Judges are human: **won't always give the same attention** to each project throughout the day
- However, **you can control engagement** through presentation
- **KEY: Genuine Interaction**
    a. Add in jokes/moments of humor
    b. Rhetorical questions
    c. Speak conversationally

ARE YOU STILL WITH US?

Genuine Interaction cont.

- Being personable goes a long way
- Greet your judge!
  - Wish them good morning/afternoon
  - Shake their hand
  - Thank them for their time
    - Most judges are volunteers
- Judges are more likely to remember students they have struck conversation with

ARE YOU STILL WITH US?

Being adaptable

- Take notice of the judge's mood before & throughout presenting. Do they seem...
  - Tired? Impatient? Bored? Interested?

Helpful sentences

- "What field do you work in?"
- "What's your background?"
- "Did that make sense?"
- "If you have any questions, feel free to interrupt"
  - Allows student to make adjustments to presenting style & start conversations

WHAT IF...

QUIZ TIME

1. A judge continuously interrupts your presentation with questions. Which approach is best?

a) Answer questions while covering main points of your project
b) Politely ask the judge to save their questions for the end
c) Answer questions, but file a complaint after competition
d) Try your best to stick to your outlined script

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- **Every judge has a unique style – It is up to you to adapt to it!**

QUIZ TIME

2. A judge says they are short on time and want a quick overview of your project. What key points should you emphasize?

a) Hypothesis, Methods, Results
b) Problem, Methods, Results
c) Problem, Results, Application
d) Literature Review, Methods, Results

QUIZ TIME

2. A judge says they are short on time and want a quick overview of your project. What key points should you emphasize?

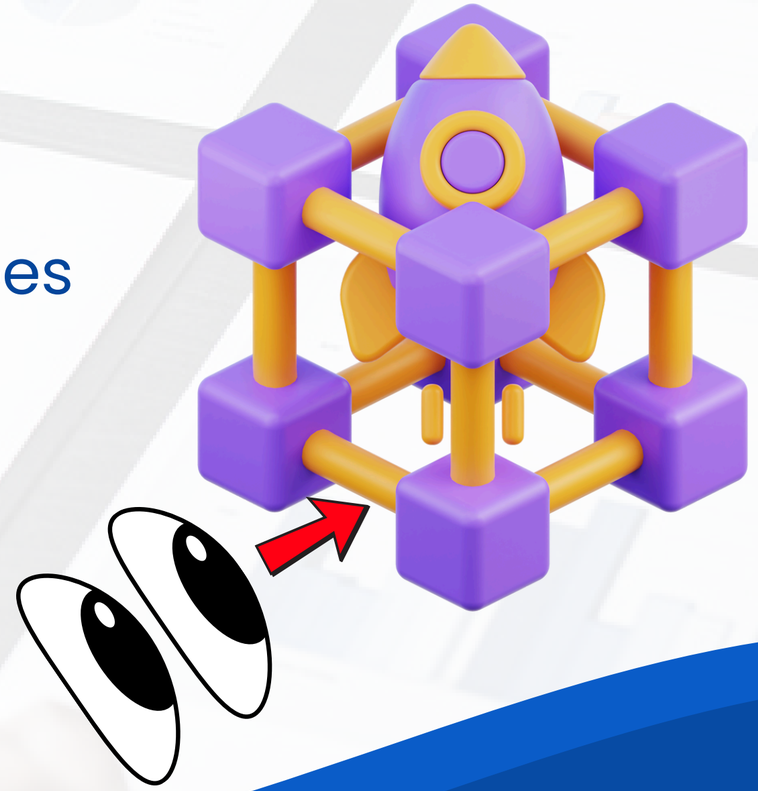
a) Hypothesis, Methods, Results
b) Problem, Methods, Results
c) Problem, Results, Application
d) Literature Review, Methods, Results

- Your project's main takeaways are **what problem you addressed** and **why it's important!**

A LASTING IMPRESSION

Judges have to UNDERSTAND and BELIEVE IN your project

- Brand identity (project title, color scheme, fonts, etc.)
  - Physical & interactive displays/prototypes to help with engagement
- Smooth speech
- Summarize information and know your key points



A LASTING IMPRESSION

Judges have to UNDERSTAND and BELIEVE IN your project

- Your presentation should tell a story
- Don’t be afraid to talk about your failures!
  - Judges like to see how you overcome challenges

SUMMARY

According to ISEF judges…

- Always be prepared to give a short summary
  - problem, approach, results & impact
- Be clear and straightforward
- Use acronyms and abbreviations sparingly
  - Clarity > Intellectualism
- Answer questions honestly
- Teach the judge your project
  - Even if they already know your field, they want to see what **you** know!

There is no judge that knows your project like you do

FINAL TIPS

- Practice your presentation in front of others
  - Peers, teachers, parents etc.
  - Learn from their questions & check for understandable flow
  - Presentations get more fluid with practice
- Create an outline for speaking points
  - Helps your presentation stay on track without being completely scripted
- **Everyone gets nervous!**

ONLINE RESOURCES

- **Regeneron ISEF 2025 Virtual Showcase**
  - https://isef.net/
  - ISEF project overviews
  - Elevator pitch videos (1-2 minutes)

- **Justin Huang's Science Fair Video Series** (Youtube)
  - 2024 Gordon E. Moore Top Award winner at ISEF
  - Helpful video guides on board design, data, and **presentations!**

Link to playlist

Q&A

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Thank you for Listening!