Effective Judging at Events: An Overview of the Updated Judge Guide
Ben Mitchell & Carol Kujawa
EFFECTIVE JUDGING AT EVENTS
AN OVERVIEW OF THE UPDATED JUDGE GUIDE

THIS PRESENTATION WILL COVER

- **Maintaining Continuity**: Aspects of Judging that have not changed
- **How Judging Is Conducted**: Overview of the process
- **The Values of Judging**: Philosophy and Core Principles
- **Updates and Changes**: Updates to the Judge Guide, new tools, updated rubrics
- **Remote Judging**: Updated and clarified
THE PHILOSOPHY OF JUDGING CORE PRINCIPLES AND PROCESS OVERVIEW
ASPECTS OF JUDGING THAT ARE UNCHANGED

MAINTAINING CONTINUITY FROM PAST SEASONS

- Judge volunteer roles
- Overall judging process - though verbiage has been clarified
- Guiding ethos of the judging process - such as confidentiality in deliberations
- Requirement that all teams at an event should have equal opportunity to be judged
- Acceptance of Digital Engineering Notebooks
- Notebook requirements for certain awards
- Requirement that only official rubrics and award descriptions be used
**JUDGING ROLES**

**Event Partner**
- Recruits Judge Advisor able to objectively manage the judging process
- Determines which awards to offer
- Collaborates with Judge Advisor in recruiting sufficient Judges
- Provides secure, quiet, spacious room for Judge deliberations (Judges’ Room)
- Provides judging supplies such as clipboards, rubrics, etc.
- Does not directly participate in any deliberations

**Judge Advisor**
- Should complete Judge Certification course
- Organizes and oversees the overall judging process at an event
- Prepares a judging schedule based on event size and agenda
- Manages conflicts of interest of Judge volunteers with teams at the event
- Facilitates deliberations and delivers final award winners to Event Partner / TM Operator

**Judge**
- Evaluates teams to determine eligibility for judged awards
- Conducts one or more activities at the event, as assigned by the Judge Advisor:
  - Evaluate Engineering - Notebooks
  - Interview teams
  - Observe teams
  - Present awards
- Work together to deliberate award winners
JUDGING OVERVIEW

THE JUDGING PROCESS

Event Partner recruits a qualified Judge Advisor to create judging schedule to track event agenda at the direction of the Judge Advisor:

- Judges review and rank Engineering Notebooks according to overall quality

- Small Judge groups (~2-3) divide teams into subsets in order to interview all teams at an event

- Each Judge group selects their top candidates for each award from their subset of teams

- Deliberations may involve additional interview/observations - judge groups may cross-interview so finalists are interviewed by additional group of judges

- Judges nominate the final candidates for each judged award

- Performance information is factored in at the end of Qualifying Matches for some awards

- Awards are usually presented at the conclusion of the event during or after finals
THE IMPORTANCE OF JUDGING

WHY OFFER JUDGED AWARDS AT YOUR EVENT?

- Judging is an integral part of REC Foundation programs
- The Judging Process gives students an opportunity to
  - practice written and verbal communication skills through the Team Interview and Engineering Notebook
  - demonstrate values of the REC Foundation Code of Conduct and Student-Centered policies
- Judging recognizes and celebrates what teams have learned and the hard work they have put into the competition as an educational activity
- Judged awards can qualify teams to higher levels of competition

Note: If Event Partners do not have the resources to comfortably conduct judging, events can run without it, but will be limited to qualifying teams via performance-based awards alone
THE ETHOS OF JUDGING

CORE PRINCIPLES FOR JUDGES

Confidentiality
Discussions & notes are kept confidential

Impartiality
Judges disclose any conflicts of interest and avoid impropriety

Consistency
Teams evaluated under similar conditions using the same materials

Qualitative Judgement
Judges use their judgement to evaluate teams

Inclusion
ALL teams must be given an opportunity to be interviewed

Balance
No team can earn more than one JUDGED award

Integrity
Awards should go to the teams that earn them

Youth Protection
Safety of students is top priority

Student-Centered Teams
Judging recognizes student-centered teams

Team Ethics and Conduct
Teams must abide by the Code of Conduct
A team that earns an award should be **Student-Centered**

A team that earns an award should abide by the REC Foundation **Code of Conduct**

The **Team Interview is a conversation between students and judges** - it is not a prepared presentation

The Interview and Notebook are **genuine reflections** of student work

The Engineering Notebook is developed by the team, **for the team** - not a “presentation notebook” designed for the judges to look at

There is **no magic formula** for winning an award

Each award is a worthy **accomplishment** in its own right - no award should be seen as a consolation prize
THE 2022-2023 JUDGE GUIDE
UPDATED AND STREAMLINED

Overall Goal  Make the Judging Process easier for new volunteers to understand, make it more consistent between events, and make it easier to accomplish with improved tools and instructions

- Verbiage changes made to the award criteria & descriptions
- Clarified descriptions of judging processes, including step-by-step descriptions
- More closely-aligned Team Interview and Engineering Notebook Rubrics with award criteria
- New tools added to aid Judges, including a note-taking form, a one-page reference sheet, and award ranking sheets
- Remote Judging explained in its own section of the Judge Guide
**Judging Single-Page Reference Sheet**

<table>
<thead>
<tr>
<th>DESIGN AWARD</th>
<th>EXCELLENCE AWARD</th>
<th>JUDGES AWARD</th>
<th>INNOVATE AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Be at or near the top of the Engineering Notebook Rubric rankings.</td>
<td>- All Design Award criteria, plus:</td>
<td>- Elected by a team that distinguishes themselves in some way that may not fit in other award categories.</td>
<td>- Recognizes an effective and well-documented design process. The team who earns the Innovate Award should be among the top contenders for the Design Award. The submission of an Engineering Notebook is a requirement for the Innovate Award.</td>
</tr>
<tr>
<td>- Exhibit a high-quality team interview.</td>
<td>- Be ranked in the top 10 or top 30% of teams in Qualification Rankings.</td>
<td>- Team demonstrates effective management of time, talent, and resources.</td>
<td>- Team displays special attributes, exemplar effort, and perseverance at the event.</td>
</tr>
<tr>
<td>- Team demonstrates effective management of time, talent, and resources.</td>
<td>- Be ranked in the top 5 or top 25% of teams in Robot Skills Rankings.</td>
<td>- Be a candidate in consideration for other Judged Awards.</td>
<td>- Team overcomes an obstacle or challenge and achieves a goal or special accomplishment at the event.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THINK AWARD</th>
<th>AMAZE AWARD</th>
<th>BUILD AWARD</th>
<th>CREATE AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes the most effective and consistent use of coding techniques and programming design solutions to solve the game challenge.</td>
<td>Recognizes a consistently high-performing and competitive robot.</td>
<td>Recognizes a well-constructed robot that is constructed with high attention to detail to hold up to the rigors of competition.</td>
<td>Recognizes a creative engineering design solution to one or more of the challenges of the competition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENERGY AWARD</th>
<th>INSPIRE AWARD</th>
<th>SPORTSMANSHIP AWARD</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes outstanding enthusiasm and excitement at the event.</td>
<td>Recognizes passion for the competition and positivity at the event.</td>
<td>Recognizes a high degree of good sportsmanship, helpfulness, and positive attitude both on and off the competition field.</td>
<td>For Full Award Descriptions, please refer to the Judge Guide</td>
</tr>
</tbody>
</table>

### INTERVIEW CHECKLIST
- Record team number on Interview Notes
- Keep a timer running. Spend equal time with every team.
- Take notes on each team. Be mindful of your environment. Do not leave notes unattended or discuss teams when others could hear.
- Wish team success and thank them for the interview – it means a lot to teams.
- Away from the team, briefly discuss interview with Judge group & fill out the Team Interview Notes sheet.

### INTERVIEW TIPS
- Ask teams if they have an upcoming match before you start your interview – matches will not wait for teams!
- Ask if all team members are present before starting the interview.
- If you have trouble finding a team, check the match schedule and find them as they leave a match.

---

**SINGLE-PAGE REFERENCE SHEET**

NEW!

Thumbnail descriptions of each Judged Award for quick reference and side-by-side comparison.

Interview Checklist and Best-Practice Interview Tips facilitate consistency among interviews... all on one page!!
TEAM INTERVIEW NOTES SHEET

NEW!

- Note-taking companion to the Team Interview Rubric
- Space for Judges to write notes as they conduct interviews
- Helps judges remember distinctive attributes for the teams they have seen
- Aligned with the Team Interview Rubric Criteria - identifies which criteria will be important for each award
TEAM INTERVIEW RUBRIC

NOW ENCOMPASSING MORE CRITERIA

- Removed reference to the Engineering Notebook as part of the Team Interview
- Added criteria to represent all Judged Awards
- Added award names to identify which criteria are linked to which awards
- Added a criterion calling attention to team attributes that may not ‘fit’ other award criteria
- Reworded all criteria descriptions to better mirror each award
- Added more space for judges to take notes
**ENGINEERING NOTEBOOK RUBRIC**

**UPDATED**

- Instructive addition of identifying the **Engineering Design Process** Criteria in list of all criteria
- Teams earn 5 points for evidence that the Notebook creation is contemporaneous with the design process
- Format-neutral verbiage replaces a previous 5-point “Bonus” for a bound notebook that put all digital notebooks at a disadvantage
- Cleaner formatting and more instructive language for ease-of-use
INITIAL AWARD CANDIDATE RANKING SHEET

NEW!

- Primarily for the **Judge Groups** as they interview teams
- Can be filled in with the awards specific to the event
- Required award fields are pre-filled
- Checkmark method for recording a running ranking of teams assigned to that Judge Group

**NEW!**

**INNOVATE AWARD**

**THINK AWARD**

**JUDGE AWARD**

**BUILD AWARD**

**DESIGN AWARD**

---

**Initial Award Candidate Ranking Sheet**

Judge Name/Judge Group:

Check the boxes below for which awards you think a team would be a strong candidate. All Judge groups will cross-reference their lists to create a final award nomination list. Additional awards being judged are added across the top blank columns. The Design and Judges Awards are pre-filled here since they are required awards. The empty cell below “Design Award” is for the Innovate Award, if offered at the event. The empty cell below each award name can be used for a description. Use multiple checkmarks to help sort recommendations.

<table>
<thead>
<tr>
<th>TEAM NUMBER</th>
<th>Design Award</th>
<th>Judges Award</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Communicating the Engineering Design Process</td>
<td>Special Recognition</td>
</tr>
</tbody>
</table>

All judging materials are strictly confidential. They are not shared beyond the Judge/Judge Advisor and shall be destroyed at the end of the event.
**FINAL AWARD NOMINATION RANKING SHEET**

**NEW!**

Visually helpful to the *Judge Advisor* for recording final Award Nominees

Multiple ranked candidates for quick reference in case teams need to be reordered

**Example cases:**
Design candidate moves to Excellence (due to high performance rankings), which potentially moves a runner-up team into the award spot, which in turn may impact other awards

Code of Conduct violation takes team out of consideration necessitating another candidate for that award

---

**Final Award Nominee Ranking Sheet**

This form is a tool for the Judge Advisor to record the ranked candidates for each award. A team can appear in multiple award categories. Excellence Award candidates are developed by taking into account Engineering Notebook scores, the Team Interview scores, and on-field performance rankings. If more rankings are needed beyond five fields provided below, or if there are additional awards being judged, a second sheet should be used.

It is important that there be multiple ranked candidates for each award. The selection of the Excellence Award winner may cause other award winners change, as teams can only earn one judged award at an event.
**AWARD DESCRIPTION SIGNS**

- Bold, easy-to-read signage to post in the Judge deliberation room
- Concise listing of criteria for each award
- Aids with ranking teams for each award during deliberations

**DESIGN AWARD**

**KEY CRITERIA**

- Engineering Notebook demonstrates clear, complete, and organized record of an iterative Engineering Design Process
- Team demonstrates effective management of time, talent, and resources
- Team interview demonstrates their ability to explain their robot design and game strategy
- Be at or near the top of Engineering Notebook Rubric rankings
- Exhibit a high-quality team interview
- Team interview demonstrates effective communication skills, teamwork, and professionalism
- Engineering Notebook and Team Interview demonstrate a student-centered ethos
REMOTE JUDGING
NEW GUIDANCE & INSTRUCTIONS
REMOTE JUDGING OVERVIEW

ENGINEERING NOTEBOOK JUDGING AND/OR
INITIAL JUDGED TEAM INTERVIEWS

- All Judging Principles and Guidelines still apply
- Must include *in-person follow up interviews* and *in-person deliberations* on the *day of the event*
- Provides flexibility for Event Partners and Judge volunteers
  - Remote Judging ahead of the event allows all teams to be judged if only a small number of judge volunteers are available
  - Judge volunteers unable to attend in-person can be utilized online
- Requires additional volunteer-hours and planning ahead of the event
- Event Partner must clearly *communicate the judging format to teams* well in advance of the event
- All teams should be *evaluated in the same format* for consistency and to eliminate format-based bias
REMOTE JUDGING
ENGINEERING NOTEBOOK

DIGITAL ENGINEERING NOTEBOOKS ARE JUDGED IN ADVANCE OF THE EVENT

- Event Partner must clearly communicate the judging format
- Teams upload Digital Engineering Notebook links via RobotEvents well in advance of the event
- Event Partner gives list of Notebook links to the Judge Advisor
- Judge Advisor organizes judges into groups to review and score notebooks using Engineering Notebook Rubric
- Judge Advisor will carry those scores to the in-person event

For Teams
- G Edit Team
- G Consent Forms (3 completed)
- G Digital Engineering Notebook

For Event Partners
- Registered Teams
- Consent Forms
- Qualifying Teams Report
- Waiting List
- Fill this event from skills
- Copy this Event
- Create in Volunteer Management System
- Match Time Calculator
- Download Tournament Manager Import Data
- Download Registration Report as CSV (will not import to Tournament Manager)
- Download Team Email List Report as CSV (will not import to Tournament Manager)
- Download Digital Engineering Notebook Links report as CSV
REMOTE INITIAL INTERVIEWS

STEP 1 OF THE DELIBERATION PROCESS

- Remote Judges interview and evaluate teams online in advance of the event using the Team Interview Rubric.
- Remote Judges will provide their Initial Award Candidate Rankings to the Judge Advisor.
- Initial Remote Judged Team Interviews followed by Initial Award Candidate Rankings completes Step 1 of deliberation process.
- Multiple teams of judges can interview teams in parallel - each submit Team Interview Rubrics and Initial Award Candidate Rankings sheets as needed.
- The competition-day judging staff has a shortlist of multiple candidates for each award to cross-interview, so fewer initial interviews will need to take place.
REMOTE JUDGING REQUIRES IN-PERSON FINISHING

OBSERVATIONS AND FINAL AWARD NOMINEE RANKING HAPPENS AT THE EVENT

Judge Advisor reviews Remote Judge Initial Award Candidate Rankings and plans the in-person judging schedule to complete any follow-up interviews, team observations with match results, and final award deliberations

- Same/Different Judges will conduct follow-up in-person team interviews and observe team performance and behavior at the event
- Initial Award Candidate teams should not be moved from one award category to another - doing so would invalidate Step 1 and “start over” the judging process
- In-person Judges and the Judge Advisor develop the Final Award Nominee Ranking, completing Step 2 through Step 6 of the deliberation process
JUDGE GUIDE

UPDATES

Updates

August 15 and December 15

Email

judging@roboticseducation.org

Official Question & Answer

https://www.robotevents.com/judging/2022-2023/QA