



# Judging

Awards and Rubrics  
For



& Beyond!

# Motivation

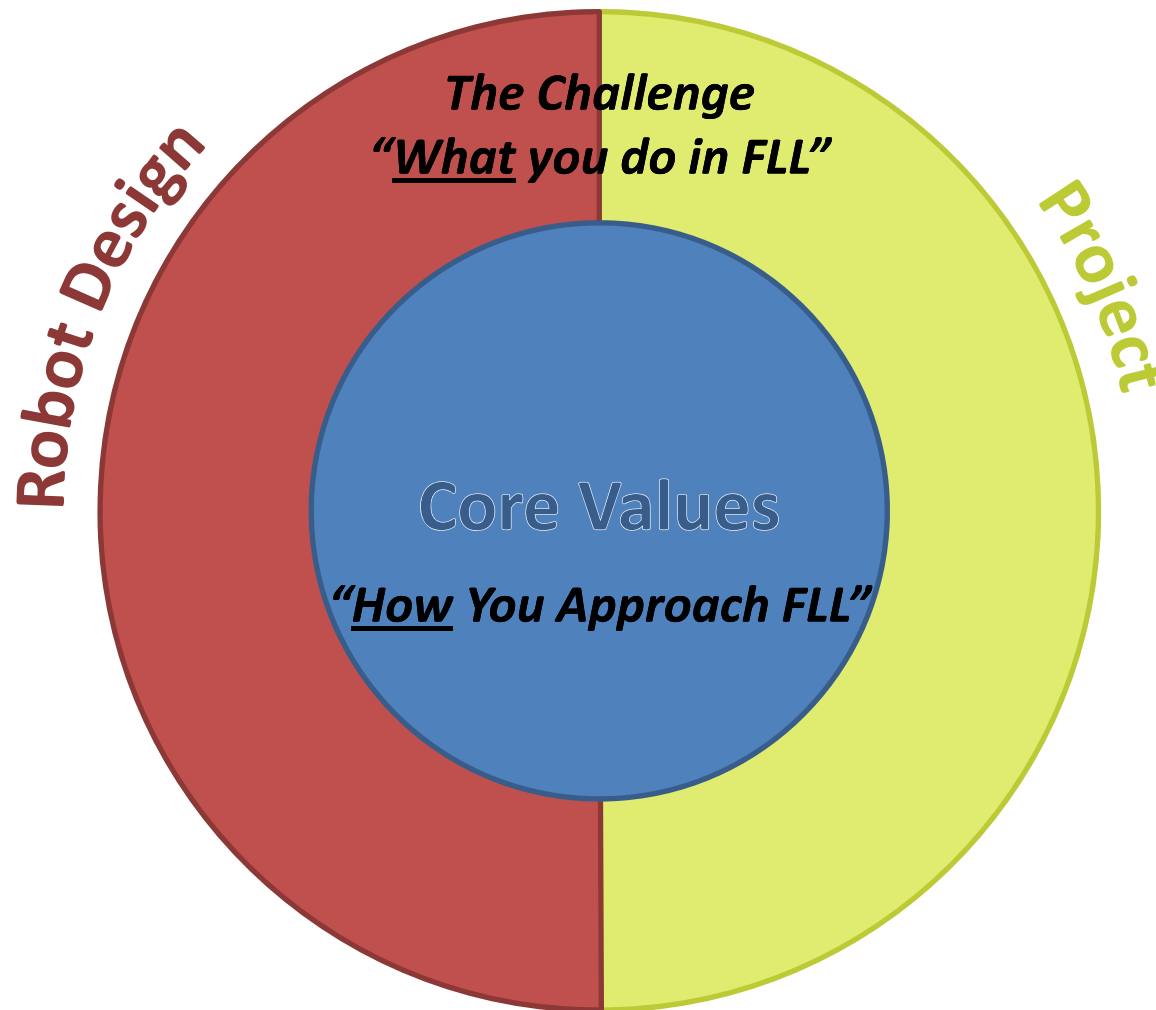


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## 1. Align judging with FLL mission and priorities



# Alignment With Mission and Priorities

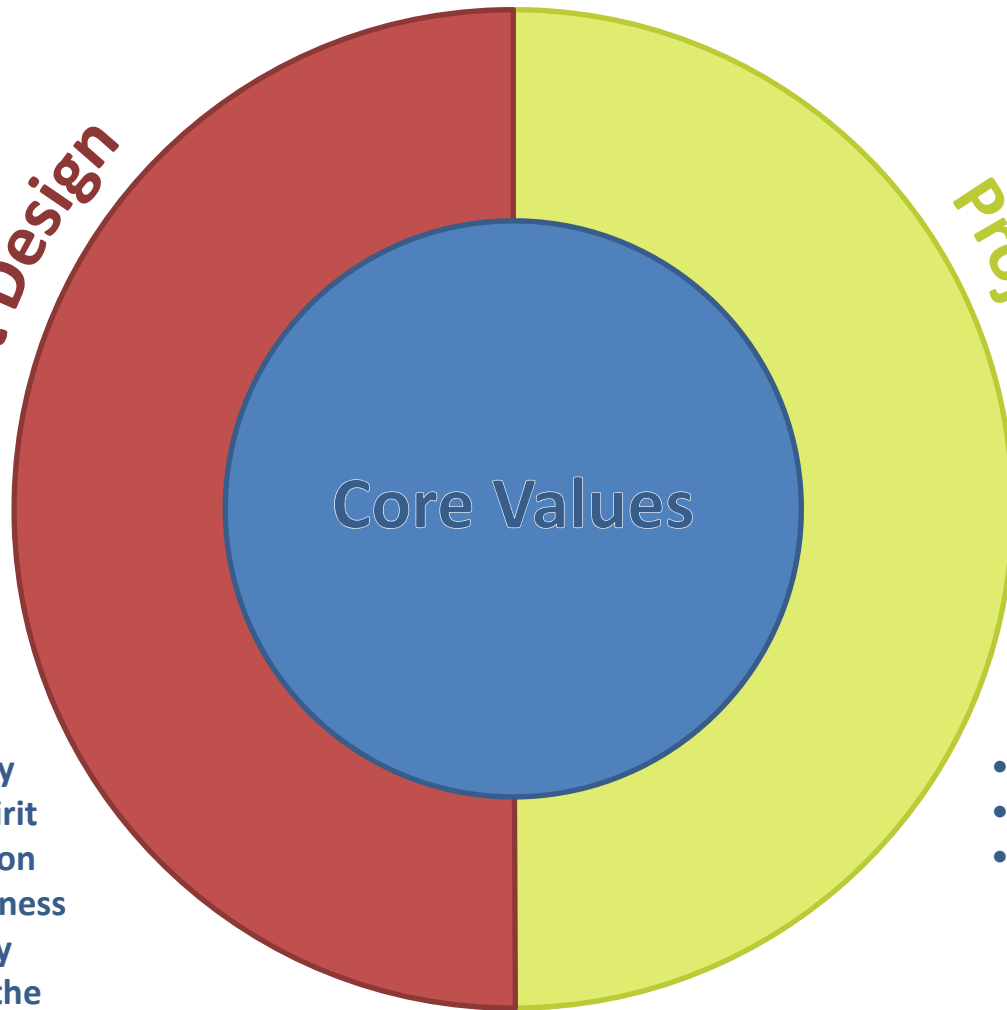


# Match Judging to Key Takeaways from FLL



- Durability
- Mechanical Efficiency
- Mechanization
- Programming Quality
- Programming Efficiency
- Automation/ Navigation
- Design Process
- Mission Strategy
- Innovation

**Robot Design**



- Problem Identification
- Sources of Information
- Problem Analysis
- Review Existing Solutions
- Team Solution
- Innovation
- Implementation
- Presentation Effectiveness
- Creativity
- Sharing

**Project**

- Discovery
- Team Spirit
- Integration
- Effectiveness
- Efficiency
- Kids Do the

**Work**

- Inclusion
- Respect
- Coopertition

# Motivation



- 1. Align judging with FLL mission and priorities**
- 2. Improve and simplify the judging experience:**
  - For teams**
  - For tournaments and volunteers**
  - For translation needs**



# Pilot Feedback



## Respondents Strongly Agree or Agree:

	Team Feedback (332 responses)	Judge Feedback (163 responses)	Partner/Judge Advisor Piloteer Feedback (16 responses)
Awards focus on most important things about FLL	<b>89%</b>	<b>92%</b>	<b>81%</b>
Award descriptions are easy to understand	<b>94%</b>	<b>94%</b>	<b>100%</b>
Rubrics focus on the most important things about FLL	<b>91%</b>	<b>91%</b>	<b>88%</b>
Rubrics are easy to understand	<b>90%</b>	<b>84%</b>	<b>87%</b>

# Motivation



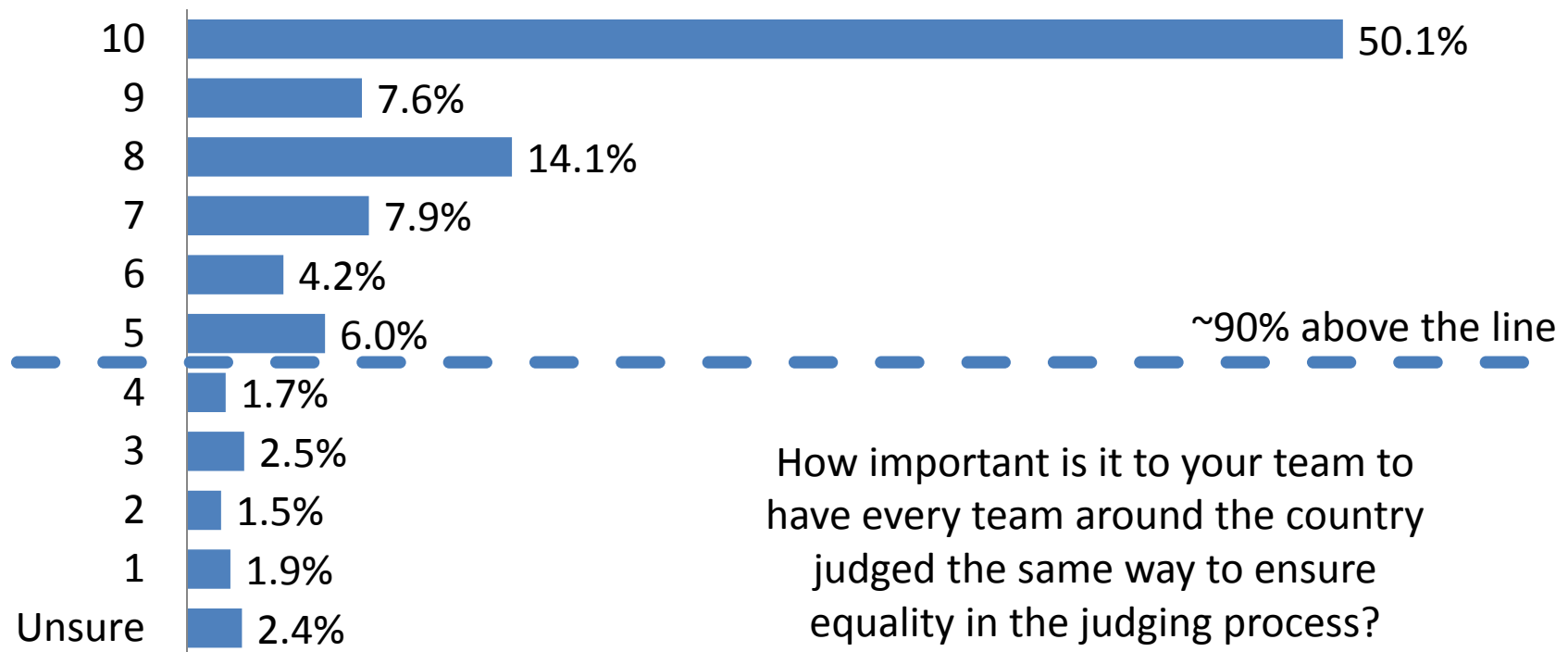
- 1. Align judging with FLL mission and priorities**
- 2. Improve and simplify the judging experience**
  - For teams
  - For tournaments and volunteers
  - For translation needs
- 3. Address global consistency**



# Global Consistency



- **Team expectations, especially with global event participation**





# Global Consistency



- **FLL Program Needs**
  - Sustainable growth
  - Ease of Replication
- **Pre-requisite for:**
  - Empowered Judge Advisors
  - Effective Training and Tools
  - Effective Time Management

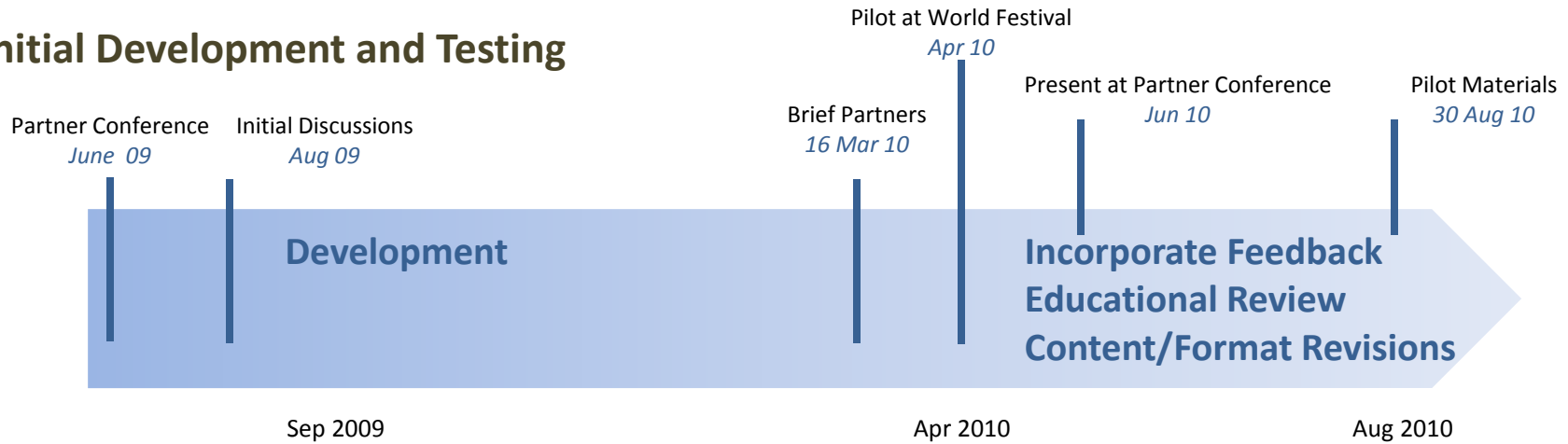


# Rollout Schedule

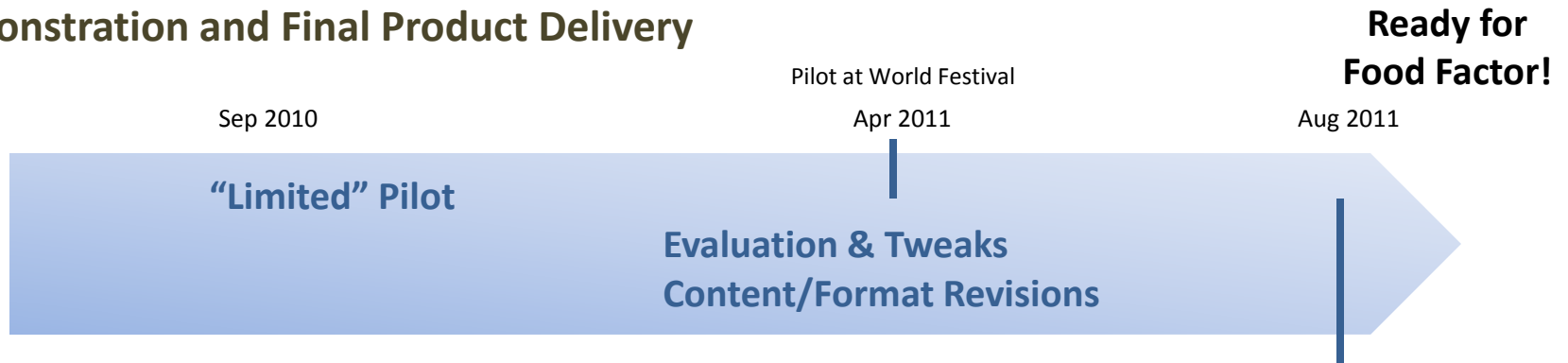


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## Initial Development and Testing



## Demonstration and Final Product Delivery



# Ready for Food Factor



- **New Rubrics**
- **New Awards**
- **New Award structures for events**
- **New Deliberations process**
- **New Tools**
- **New Materials**

# RUBRICS & PRIMERS

# Key Rubric Format Changes



FLL		Project	Team Number		
<p><b>Directions:</b> For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the awards for which you would like this team to be considered.</p>					
		Beginning	Developing	Accomplished	Exemplary
Research	<b>Problem Identification</b>	Clear definition of the problem being studied			
	N	unclear; few details	somewhat clear; details missing	clear; detailed	very clear; very detailed
	D				
	<b>Sources of Information</b>	Types (e.g. books, magazines, websites, reports and other resources) and number of quality sources cited, including professionals in the field			
	N	one type of information cited; minimal sources	two types of information cited; several sources	three types of information cited; many sources, including professionals	four(+) types of information cited; extensive sources, incl. professionals
	D				
Research	<b>Problem Analysis</b>	Depth to which the problem was studied and analyzed by the team			
	N	minimal study; no team analysis	minimal study; some team analysis	sufficient study and analysis by team	extensive study and analysis by team
	D				
Research	<b>Review Existing Solutions</b>	Extent to which existing theories and solutions were analyzed by the team, including an effort to verify the originality of the team's solution			
	N	minimal review; no team analysis	minimal review; some team analysis	sufficient review and analysis by team	extensive review and analysis by team
	D				
Comments:					
Innovative Solution	<b>Team Solution</b>	Clear explanation of the proposed solution			
	N	difficult to understand	some parts confusing	understandable	easy to understand by all
	D				
	<b>Innovation</b>	Degree to which the team's solution makes life better by improving existing options, developing a new application of existing ideas, or solving the problem in a completely new way.			
	N	existing solution/application	solution/application contains some original element(s)	original solution/application	original solution/application with the potential to add significant value
Innovative Solution	<b>Implementation</b>	Consideration of factors for implementation (cost, ease of manufacturing, etc.)			
	N	minimal factors considered	some factors considered	factors well considered; some question about proposed solution	factors well considered and feasible solution proposed
	D				
Comments:					
Presentation	<b>Presentation Effectiveness</b>	Message delivery and organization of the presentation			
	N	unclear OR disorganized	somewhat clear; minimal organization	mostly clear; mostly organized	very clear AND well organized
	D				
	<b>Creativity</b>	Imagination used to develop and deliver the presentation			
	N	minimally engaging OR unimaginative	engaging OR imaginative	engaging AND imaginative	very engaging AND exceptionally imaginative
Presentation	<b>Sharing</b>	Degree to which the team shared their Project before the tournament with others who might benefit from the team's efforts			
	N	shared with one individual	shared with one group	shared with one individual or group who may benefit	shared with multiple individuals or groups who may benefit
	D				
Comments:					
<b>Awards Consideration:</b>		<b>Research</b>	<b>Innovative Solution</b>	<b>Presentation</b>	

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- Shorter list of criteria matched to Key FLL Takeaways
- More focus on comments (teams crave feedback!)
- Criteria linked to specific awards
- Streamlined text
  - Ease of use; translation
- Emphasis on team demonstration of all criteria
  - Note “ND” option
- Includes award considerations (more feedback!)

# Criteria Block



	Beginning	Developing	Accomplished	Exemplary	
<b>Inspiration</b>	<b>Discovery</b> Balanced emphasis on all three aspects (Robot, Project, Core Values) of FLL; it's not just about winning awards				
	N D	emphasis on only one aspect; others neglected	emphasis on two aspects; one aspect neglected	emphasis on all three aspects	balanced emphasis on all three aspects
	<b>Team Spirit</b> Enthusiastic and fun expression of the team identity				
	N D	minimal enthusiasm AND minimal identity	minimal enthusiasm OR minimal identity	team is enthusiastic and fun; clear identity	team engages others in their enthusiasm & fun; clear identity
	<b>Integration</b> Application of FLL values and skills outside FLL (ability to describe current and potential examples from daily life)				
	N D	team does not apply FLL values and skills outside FLL	team able to describe at least one example	team able to describe multiple examples	team able to describe multiple examples, incl. individual stories

Comments:

# Awards Consideration Block



Awards Consideration:

Mechanical Design

Programming

Strategy & Innovation

# 2011 World Festival Judge Survey

## “One thing that worked well...”

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- **“The new Rubrics made judging simple, fast and efficient”**
- **“The new Rubric was a significant improvement over past versions”**
- **“New Judging Forms were very easy to work with; provided much better feedback to teams...quick to read and understand”**





# Global Standards Rubrics



- **Global judging tool; must be utilized as provided**
- **All rubric criteria shall be weighted equally**
- **Each Rubric item shall be evaluated**

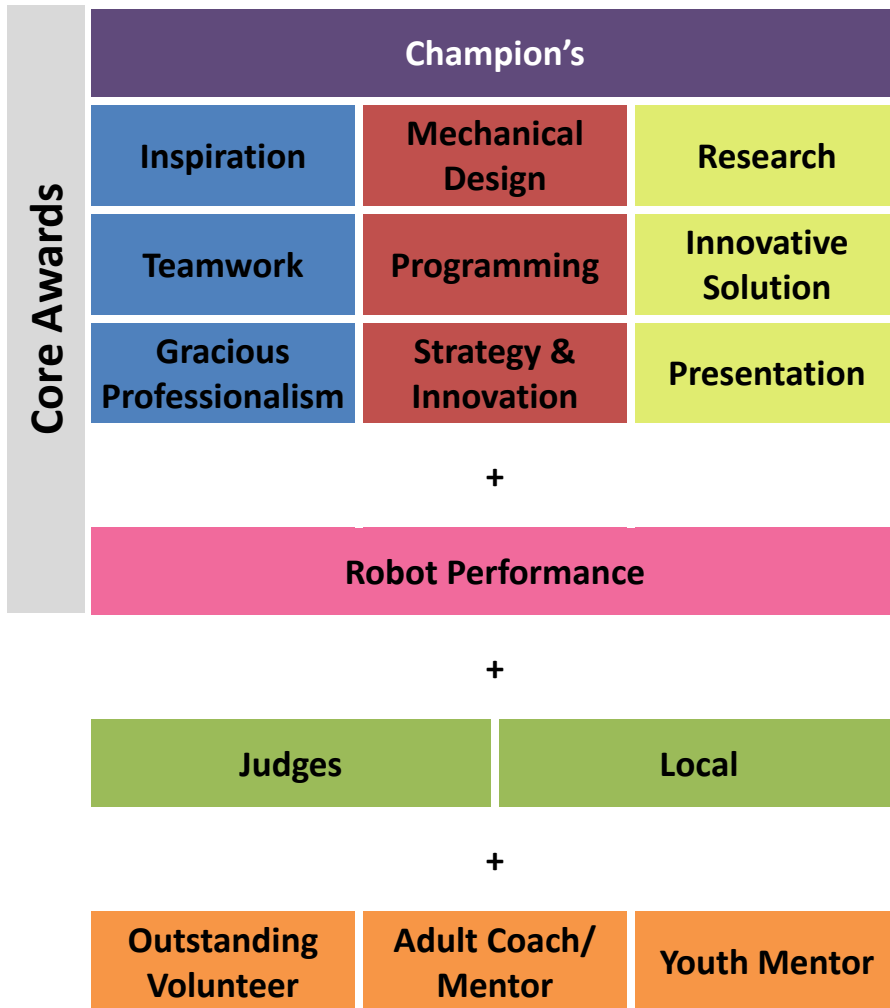
# Rubric Primers



- **Short clarifications and examples to orient judges to new rubrics**
- **Address common questions**
- **Give judges common frame of reference for evaluations**

# EVENT STRUCTURE & AWARDS

# Event Structure



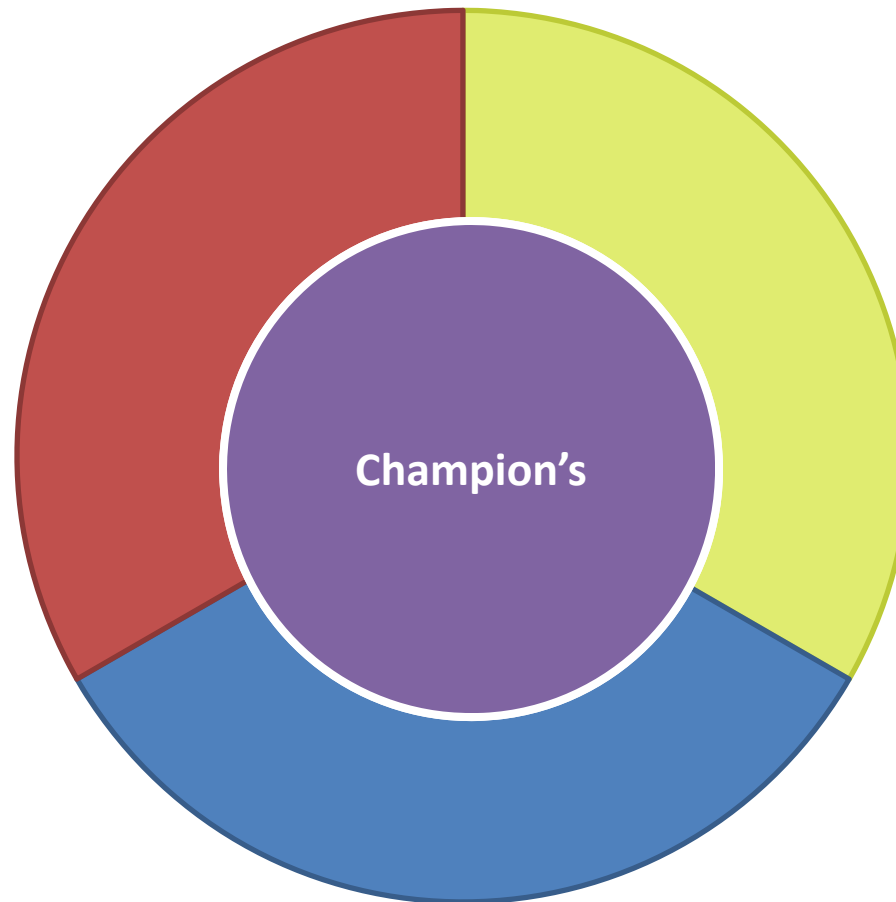
- Specifies set of required awards
  - Core awards all of equal weight, except Champion's
- Event size and type define requirements
- Champion's award required at all official events

# Core Awards

## Champion's Award



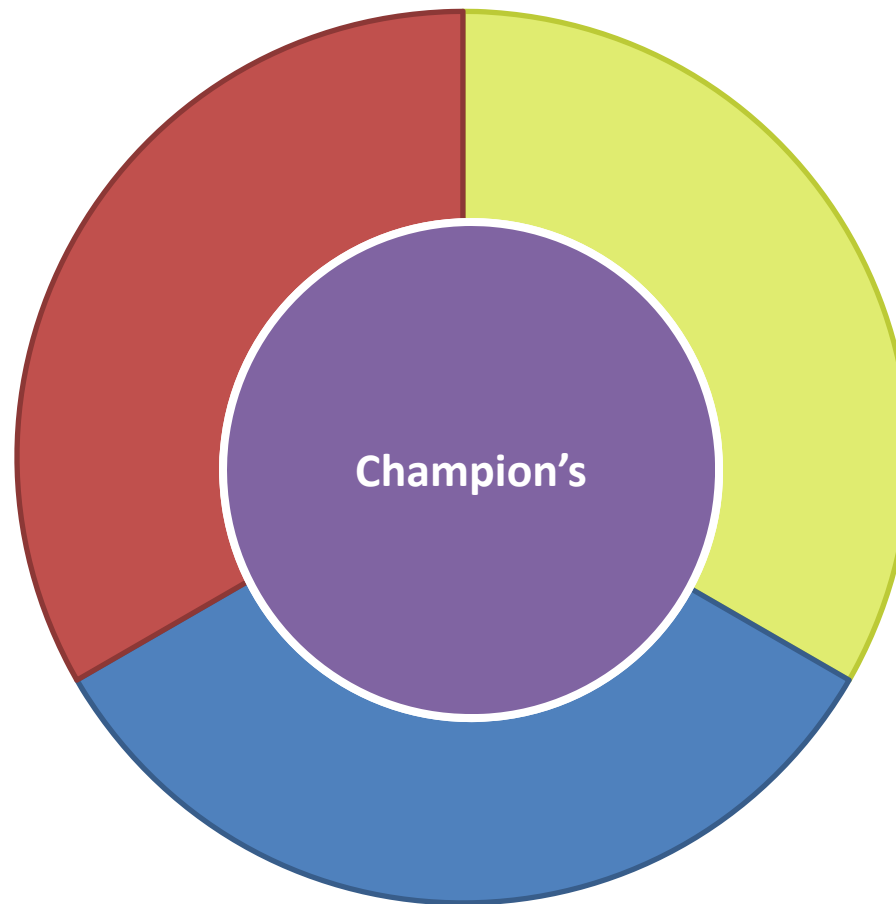
This award recognizes a team that embodies the FLL experience, by fully embracing our Core Values while achieving excellence and innovation in both the Robot Game and Project.



# Champion's Award Weighting and Requirements



**1/3 Robot  
Design**  
+  
**1/3 Project**  
+  
**1/3 Core  
Values**



Based on strong performance across all three judged areas AND additional requirements:

### Robot

- Robot Game score in top 40% of teams

### Project

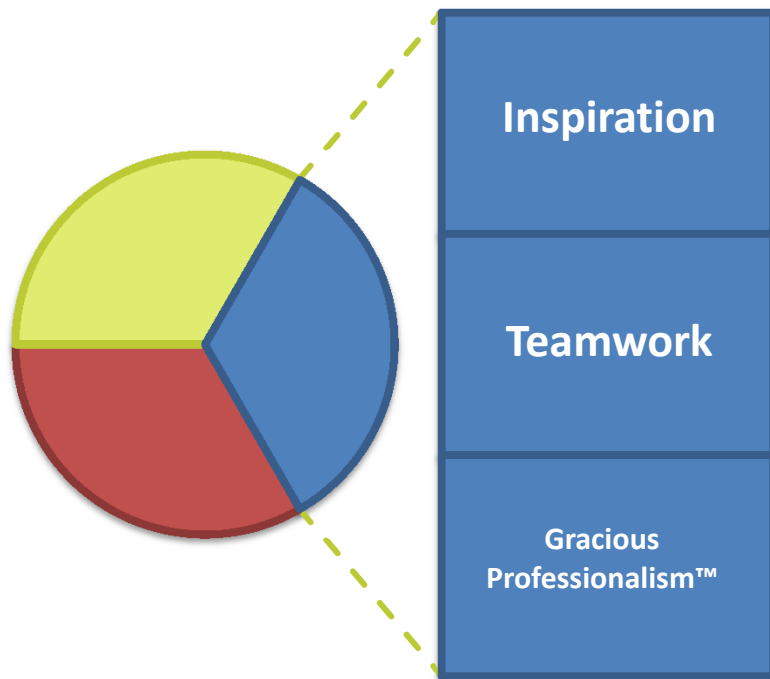
- Team must complete all 3 parts

### Core Values

- Team must adhere to all Core Values

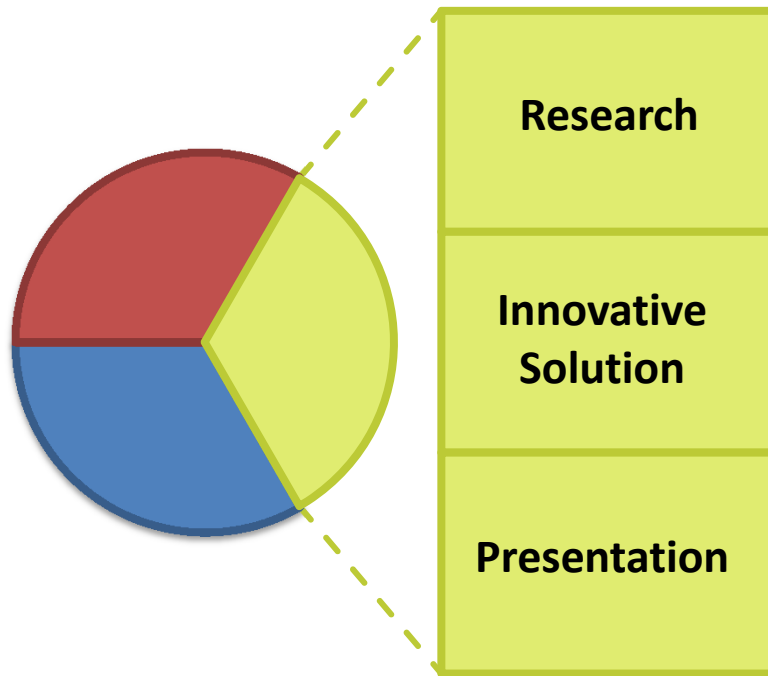
# Core Awards

## Core Values



- This award celebrates a team that is empowered by their FLL experience and displays extraordinary enthusiasm and spirit.
- This award recognizes a team that is able to accomplish more together than they could as individuals through shared goals, strong communication, effective problem solving and excellent time management.
- This award recognizes a team whose members show each other and other teams respect at all times. They recognize that both friendly competition and mutual gain are possible, on and off the playing field.

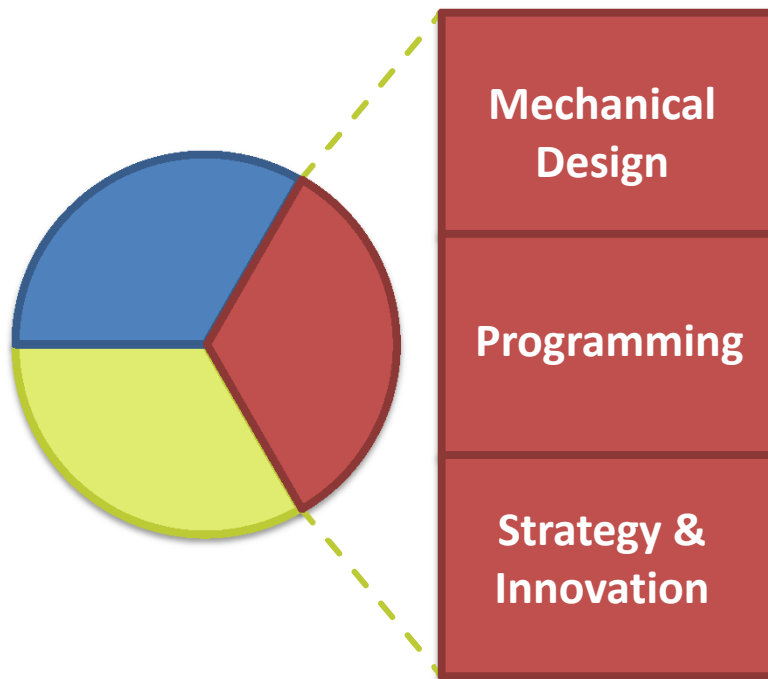
# Core Awards Project



- This award recognizes a team that utilizes diverse resources to formulate an in-depth and comprehensive understanding of the problem they have identified.
- This award recognizes a team's solution that is exceptionally well-considered and creative, with good potential to solve the problem researched.
- This award recognizes a team that effectively communicates the problem they have identified and their proposed solution to both the judges and other potential supporters.



# Core Awards Robot Design



- This award recognizes a team that designs and develops a mechanically sound robot that is durable, efficient and highly capable of performing challenge missions.
- This award recognizes a team that utilizes outstanding programming principles, including clear, concise and reusable code that allows their robot to perform challenge missions autonomously and consistently.
- This award recognizes a team that uses solid engineering practices and a well-developed strategy to design and build an innovative, high performing robot.

# Core Awards

## Robot Performance



### Robot Performance

- This award recognizes a team that scores the most points during the Robot Game. Teams have a chance to compete in at least three 2.5 minute matches and their highest score counts.
- Determined on the field, **NOT JUDGED**
- If a tie, go to second highest, then third highest runs
- Robot Performance remains the only exception to one (team) award per team

# Optional Awards



## Judges Awards

### Examples:

- **Rising Star**
  - **Perseverance**
  - **Aesthetics/Style**
- **During the course of competition the judges may encounter teams whose unique efforts, performance or dynamics merit recognition. Some teams have a story that sets them apart in a noteworthy way. Sometimes a team is so close to winning an award that the judges choose to give special recognition to the team. Judges Awards allow the freedom to recognize remarkable teams that stand out for reasons other than the Core Award categories.**

# Optional Awards



## Local Awards

- **Locally defined**

### Examples:

- **Highest Average (consistency)**
- **Special Sponsor Awards**

# Special Recognition Awards



## Outstanding Volunteer

### Outstanding Volunteer Award

- The FLL program would not exist without its volunteers. This award honors an extraordinary volunteer(s) whose dedication to the FLL program has a positive impact on the team experience.

## Adult Coach/Mentor

### Adult Coach/Mentor Award

- Many teams reach significant milestones thanks to their close relationship with an adult mentor. This award goes to the coach or mentor whose wisdom, guidance, and devotion are most clearly evident in the team's discussion with the judges.

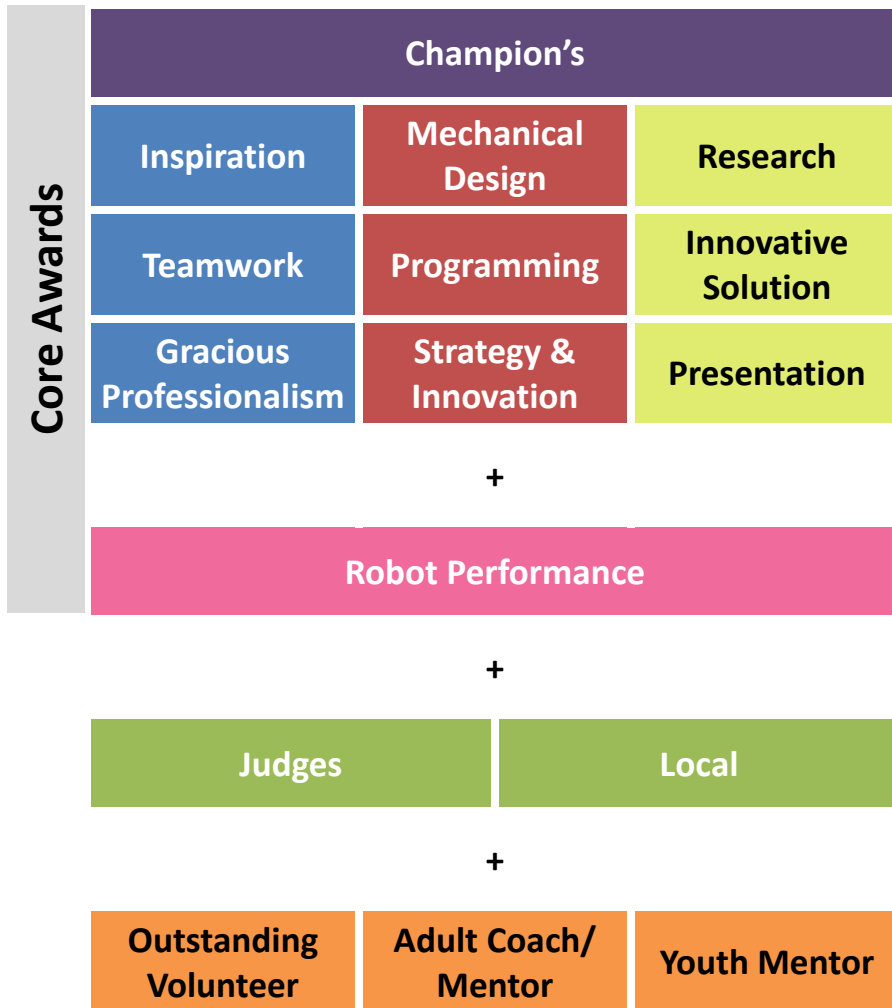
## Young Adult Mentor

### Young Adult Mentor Award

- FLL presents this award to the young adult, high school or college mentor whose support, impact, inspiration, and guidance are most clearly evident in the team's discussion with the judges.

# Award Structure

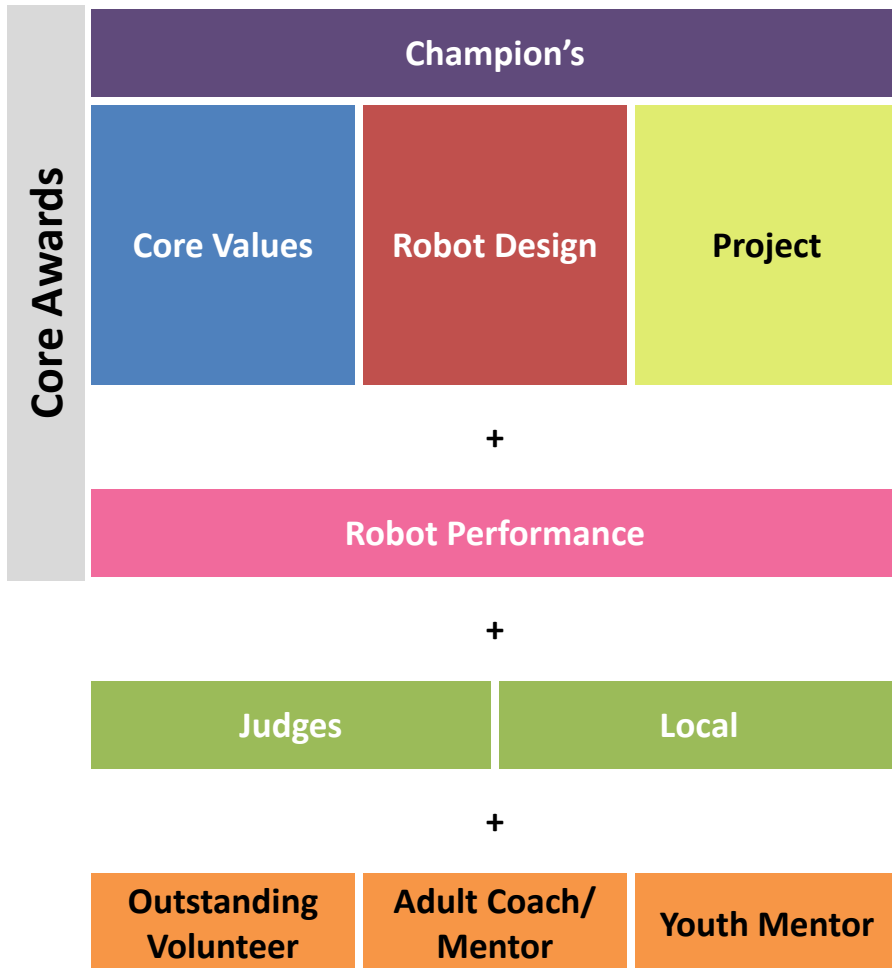
## Championships & Qualifiers > 20 teams



- **Champion's Award given to 1<sup>st</sup> and 2<sup>nd</sup> place (or more if desired)**
  - Only 1<sup>st</sup> place required for large Qualifier
- **All other Core Awards given to equal depth**

# Award Structure

Qualifiers < or = 20 teams



## Required Awards:

- 1<sup>st</sup> place Champion's Award (at a minimum)
- One overall Core Award given in each category
  - Determined by overall rank in that area
- Robot Performance

**Must use Championship structure rather than additional placements**

# AWARDS CONSIDERATIONS



# Overall



- **We continue to recommend that a minimum of 30% of participating teams receive awards**
- **Robot Performance remains the one exception to one (team) award per team**
- **Qualifier advancement standard policy based on Champion's Award criteria**
  - **Consider ceremony recognition strategies**



# Overall



- **FLL Championship trophies are reserved for Championships**
  - **Alternative forms of recognition must be used for Qualifiers and may be used for Special Recognition Awards**
- **Judges and/or Local Awards may be used in addition to Core Awards or to “fill in” award counts if desired**
  - **These MUST be used only to recognize teams for an accomplishment not addressed by a Core Award category**



# Team Participation



- **Only eligible for awards at the first official event of each qualifying level attended during season**
- **Teams must participate in all 3 Judged areas and the Robot Game to be eligible for any Core Awards**
- **All team members expected to participate in each judged session**
  - **Specialization is okay, but must be able to direct Q & A**
  - **Encourage parents of students with special needs to share successful participation strategies prior to the event**
- **Monitor 10 person team limit:**
  - **A team of 30 with a 10 person competition team is not okay**



# Project Judging



- **Ongoing constant requirements:**
  - Identify a Real-World Problem
  - Create an Innovative Solution
  - Share your research and solution
- **Season-specific Requirements:**
  - Can vary e.g. Power Puzzle Energy Audit
- **Presentation time of 5 minutes, including any setup**
- **Team must demonstrate completion of all requirements during presentation portion**
- **Live presenter; A/V as enhancement only**



# Core Values Judging



- **Non-adherence to FLL Core Values (team members, coaches, parents) disqualifies teams from receiving any awards**
- **Core Values input form for all volunteers; increased awareness of policies and consequences:**
  - **Adult Intervention**
  - **Gracious Professionalism**
- **World Festival Core Values nominees may be selected from among any team winning any Core Values award at any event, or by a process determined by the Partner in their region**



# Robot Design Judging



- **Allowable Parts, software and all rules must be followed on the table to win Robot Performance or any Robot Design awards**
  - **May use additional parts in Robot Design Judging when clearly identified**



# Robot Performance



- **Award ALWAYS goes to the highest score after a minimum of 3 official rounds**
- **May use Local Awards to recognize:**
  - **Elimination Rounds**
  - **Alliance Rounds**



# OTHER JUDGING CHANGES



# Core Values Judging



- **Minimum 10 minute session; dedicated room**
  - No longer an option to do in pits or combine with other judging sessions
- **Teamwork Activity remains optional but strongly encouraged**
  - Help us expand the Wiki Activity Library



# Core Values Judging Poster



- **Used as a tool to jumpstart discussion**
  - 3 hour preparation maximum suggested
  - 2 minute presentation maximum
  - followed by Q & A
- **Focuses on more complex/abstract rubric criteria:**
  - Discovery, Inclusion, Integration, Coopertition
- **Increased Pit/Event Visibility**
- **World Festival videos available**
- **Looking for Food Factor Pilot Regions**



# Robot Design Judging



- **Robot Design Executive Summary format**
  - **Looking for Food Factor Pilot Regions**



# DISCUSSION TOPICS

# Additional Topics for Discussion



- Is the Champion's requirement of 40% workable for Qualifiers?
  1. Any modification needed to Award requirement for small qualifiers?
  2. Any modification needed to qualifier advancement policy?



# Additional Topics for Discussion

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- **Individual Awards (Coach Mentor, Youth Mentor, Outstanding Volunteer)**
  - Should each of these be mandatory or recommended only?
  - Best practices for process?

# Additional Topics for Discussion

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- **15 minute Judging Sessions: Pros and Cons**
  - Event Impact
  - Team Impact