STATISTICAL RESULTS – JUDGING

EXPLANATION

On this page you can find the results from the *FIRST®* LEGO® League Open European Championship 2013. This data will help you to understand how all the teams in general preformed for the *initial judging sessions* and will help you to gauge how your team preformed based on the rubrics you have received back after the tournament. Remember that –in accordance with FLL regulations- no rankings will be published. The statistical data displayed here is merely to help you asses your *own performance against the statistical averages*.

What the diagrams tell you

When you take your own rubrics you can sum up your score for a specific award category. You can then compare your performance against the diagram and determine to what group and percentage you belong for that award. It will help you to determine how your *initial* judging session's scored compared to the other teams on average. However don't forget to look at the comments if there any: these will provide you with the best suggestions for improvements for next season.

What the diagrams *won't* tell you

Note that the Open European Tournament is a competition where the finest teams meet and all of these teams meet the basic qualifications to be considered for an award. The diagrams listed here merely illustrate the statistical results from the rubrics. However judges look at more than just the rubrics. Therefore these diagrams only tells you part of the story as they don't show results from pit visits, nominations or any deliberation. Remember that these results don't tell you anything about rankings or how close you may have been to an award.

And finally a few tips from the judges' for all teams:

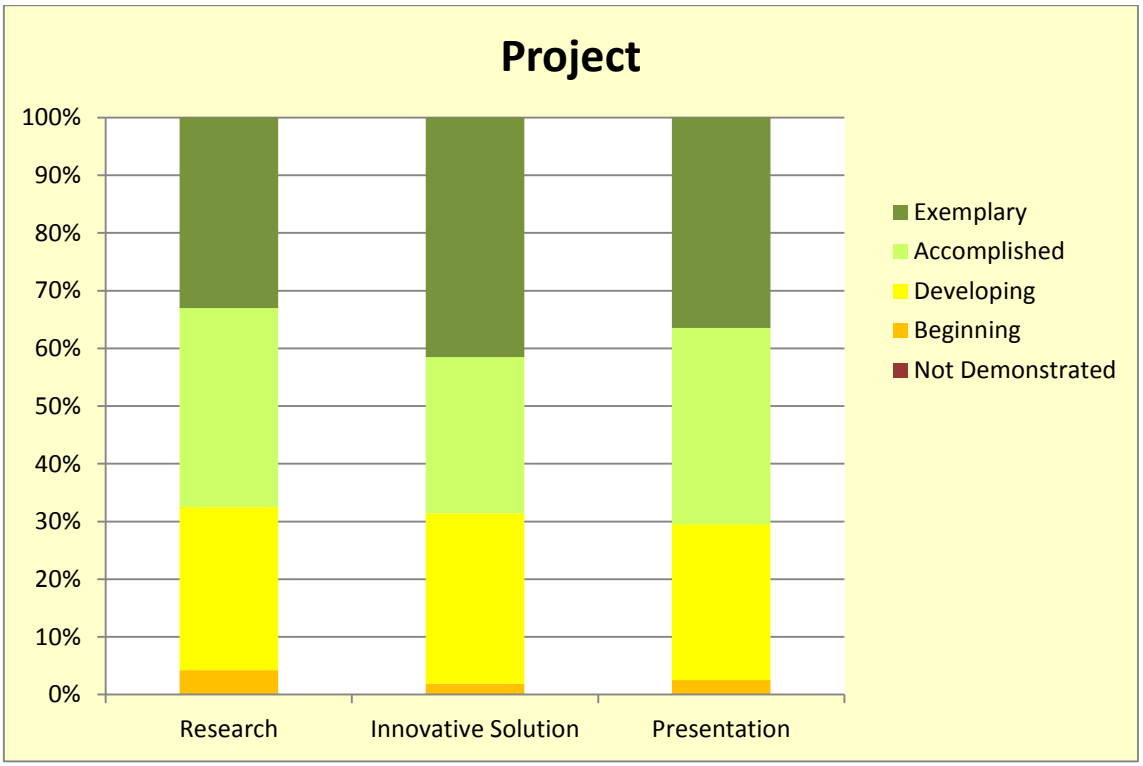
- Review the challenge (project and robot) and core values documents a few days before the tournament. Don't forget to also check out the rubrics: use them as a check list, so you don't forget anything!
- Be prepared for a tournament: verify the facilities (tables, power, projector and computer), timing of the sessions (e.g. how long presentations last), requirements and rules. Remember that each tournament can differ in these things! Don't make assumptions based on previous experiences!
- If something is really critical to your project/robot/core values presentation, bring it yourself and bring a backup! As you may have found out already: technology can fail at the most inconvenient times (Murphy's Law), so bring hard-copies (prints) of your presentations, programs, pictures etc.

TOURNAMENT DATA

Tournament		
	Date & Place:	May 8th – May 10th 2013 at Heinz Nixdorf Museum, Paderborn
	Organization:	Hands-on-technology
	Judge Advisors:	Dana El Atassi, Kenny Meesters
	Awards:	**37:** 9 Core Awards (1,2,3), Robot Performance (1,2,3) Champions (1,2,3), Judges Award, Youth Coach/Mentor, Adult Coach Mentor, DSpace
	Rules applied:	US FIRST LEGO League (revised)
	Judging system:	Sessions, Pit Visits, Deliberation
Teams		
	# Teams:	53
	# Countries:	33
Judges		
	# Project:	11
	# Core Values:	11
	# Robot Design:	10
	# Countries:	6
	# Judging panels:	4

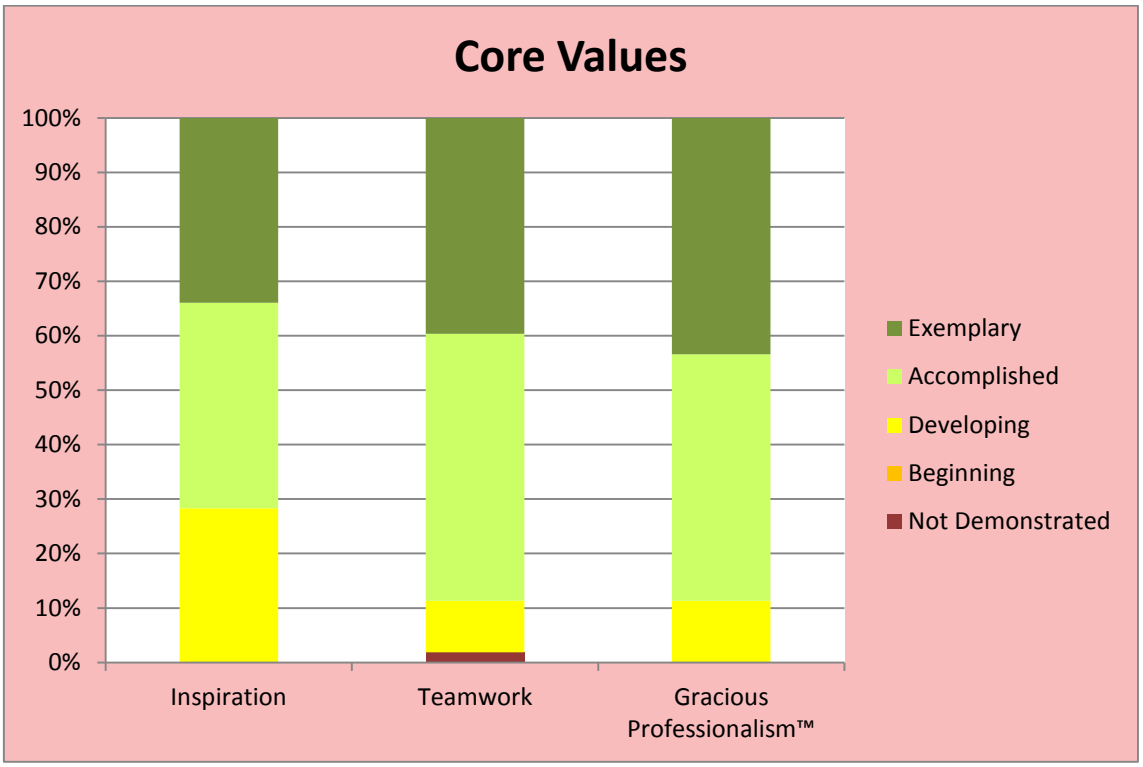
PROJECT

The project judging team looks at three distinct areas, each which has its own award. The judges look at the performed ***Research***: the use of sources, the problem definition, analysis and review of existing solutions. The second category considers your ***Innovative Solution***: how innovative is the solution, how it is explained and whether the implementation of the solution was considered. Finally the project judges look at the ***Presentation*** of your research and solution: how effective can you convey your message, how appealing your presentation is and if you have shared your project with others.



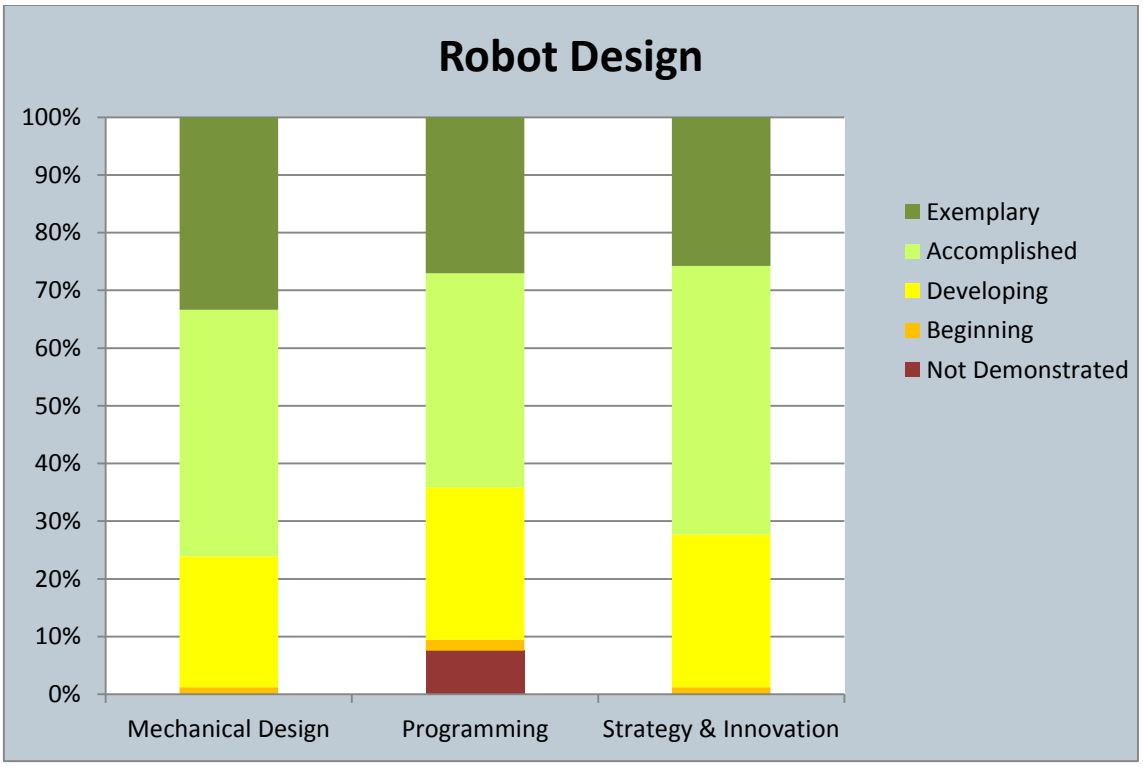
CORE VALUES

The core value judges look at how your team works together, what you've learned this season and how you were inspired. The ***Inspiration*** category is about what you as a team have learned, your team vibe and the display of the FLL values outside of the competition. ***Teamwork*** looks at how you reach decisions within your team, how efficient you work with what you have and if you have done the work yourself. ***Gracious Professionalism™*** looks at the display of FLL Core Values in your team.



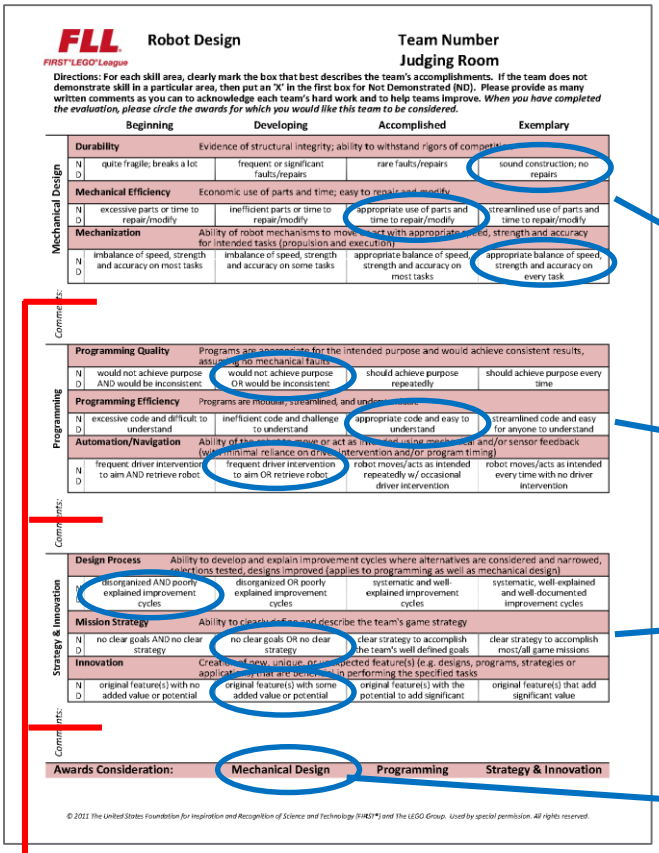
ROBOT DESIGN

Robot design judges take a closer look at your robot. Again there are three distinct areas each with their own award. ***Mechanical design*** looks at the durability ("strength") of the robot, the efficiency of the built and the integration of mechanical principles and mechanisms. ***Programming*** considers the quality, the efficiency and the overall use of programming skills. Finally ***Strategy & Innovation*** reviews the design process of your robot, how you handle the missions and how innovative your robot is.



EXAMPLE

Below you can find an example form and how to compare it against the chart (Robot Design in this instance). You can take the average of your score and compare it against the chart. This will help you to roughly determine which areas your team could improve upon for next season.



FLL FIRST LEGO League

Robot Design — **Team Number** — **Judging Room**

Directions: 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.***

		Beginning	Developing	Accomplished	Exemplary
Mechanical Design	**Durability** — Evidence of structural integrity; ability to withstand rigors of competition				
	ND	quite fragile; breaks a lot	frequent or significant faults/repairs	rare faults/repairs	sound construction; no repairs
	Mechanical Efficiency — Economic use of parts and time; easy to repair and modify				
	ND	excessive parts or time to repair/modify	inefficient parts or time to repair/modify	appropriate use of parts and time to repair/modify	streamlined use of parts and time to repair/modify
	Mechanization — Ability of robot mechanisms to move/act with appropriate speed, strength and accuracy for intended tasks (propulsion and execution)				
	ND	imbalance of speed, strength and accuracy on most tasks	imbalance of speed, strength and accuracy on some tasks	appropriate balance of speed, strength and accuracy on most tasks	appropriate balance of speed, strength and accuracy on every task
Comments:					
Programming	**Programming Quality** — Programs are appropriate for the intended purpose and would achieve consistent results, assuming no mechanical faults				
	ND	would not achieve purpose AND would be inconsistent	would not achieve purpose OR would be inconsistent	should achieve purpose repeatedly	should achieve purpose every time
	Programming Efficiency — Programs are modular, streamlined, and understandable				
	ND	excessive code and difficult to understand	inefficient code and challenge to understand	appropriate code and easy to understand	streamlined code and easy for anyone to understand
	Automation/Navigation — Ability of the robot to move or act as intended using programming and/or sensor feedback (w/ minimal reliance on driver intervention and/or program timing)				
	ND	frequent driver intervention to aim AND retrieve robot	frequent driver intervention to aim OR retrieve robot	robot moves/acts as intended repeatedly w/ occasional driver intervention	robot moves/acts as intended every time with no driver intervention
Comments:					
Strategy & Innovation	**Design Process** — Ability to develop and explain improvement cycles where alternatives are considered and narrowed, selections tested, designs improved (applies to programming as well as mechanical design)				
	ND	disorganized AND poorly explained improvement cycles	disorganized OR poorly explained improvement cycles	systematic and well-explained improvement cycles	systematic, well-explained and well-documented improvement cycles
	Mission Strategy — Ability to clearly define and describe the team's game strategy				
	ND	no clear goals AND no clear strategy	no clear goals OR no clear strategy	clear strategy to accomplish the team's well defined goals	clear strategy to accomplish most/all game missions
	Innovation — Creation of new, unique, or unexpected feature(s) (e.g. designs, programs, strategies or applications) that are beneficial in performing the specified tasks				
	ND	original feature(s) with no added value or potential	original feature(s) with some added value or potential	original feature(s) with the potential to add significant	original feature(s) that add significant value
Comments:					
Awards Consideration:			**Mechanical Design**	**Programming**	**Strategy & Innovation**

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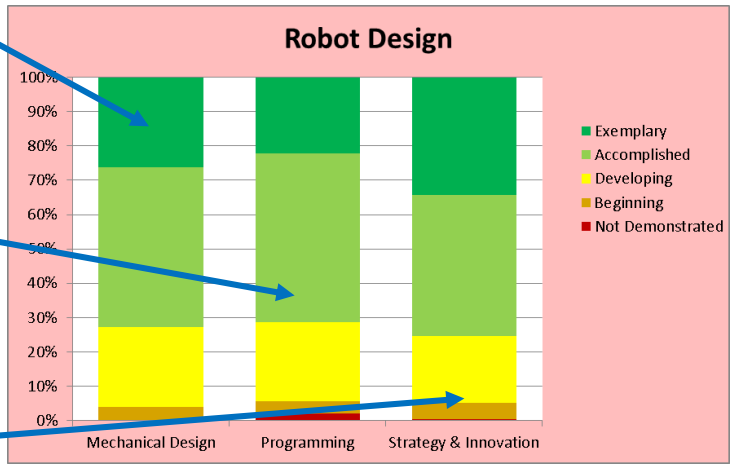

In the "Awards Consideration" section you can find for which awards the judges have considered your team.

Don't forget to review the comments!