



FLL Project – Best Practices

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The Big Picture



Be Enthusiastic about the Project!
The kids will follow your lead

- “ Get the Project Started & “Done” early
- “ Organization is more important than Engineering Experience
 - “ Have a Project Goal for every meeting
- “ It is easier to do Project Homework than Robot Homework
- “ Take a Field Trip in October!...focus your project, fun memories, easy to talk about
- “ Typical Plans for a 2 hour meeting:

Early in Season

10 min - Snack & Discussion
30 min – Project ← or
60 min – Robot Game ←
15 min – Core Values
5 min – Wrap-up / Assign HW

Later in Season

10 min - Snack & Public Speaking
45 min – Project / Robot ← Switch groups
15 min – Core Values
45 min – Robot / Project ←
5 min – Wrap-up / Assign HW



Know the Rubric...Know your Kids



“ Presentation

- “ Many ways to do well – everything is “equal”
- “ Address every aspect

“ Project Development

- “ Focus on your Team’s strengths
- “ Watch for your Team’s weaknesses

“ Meetings

- “ Review Rubric with you Team
- “ Post it in your meeting area
- “ Have 2 Rubric Experts

Use the Rubric to help Prioritize your Resources & Make Decisions



FIRST LEGO LEAGUE Project
ANIMAL ALLIESSM PILOT

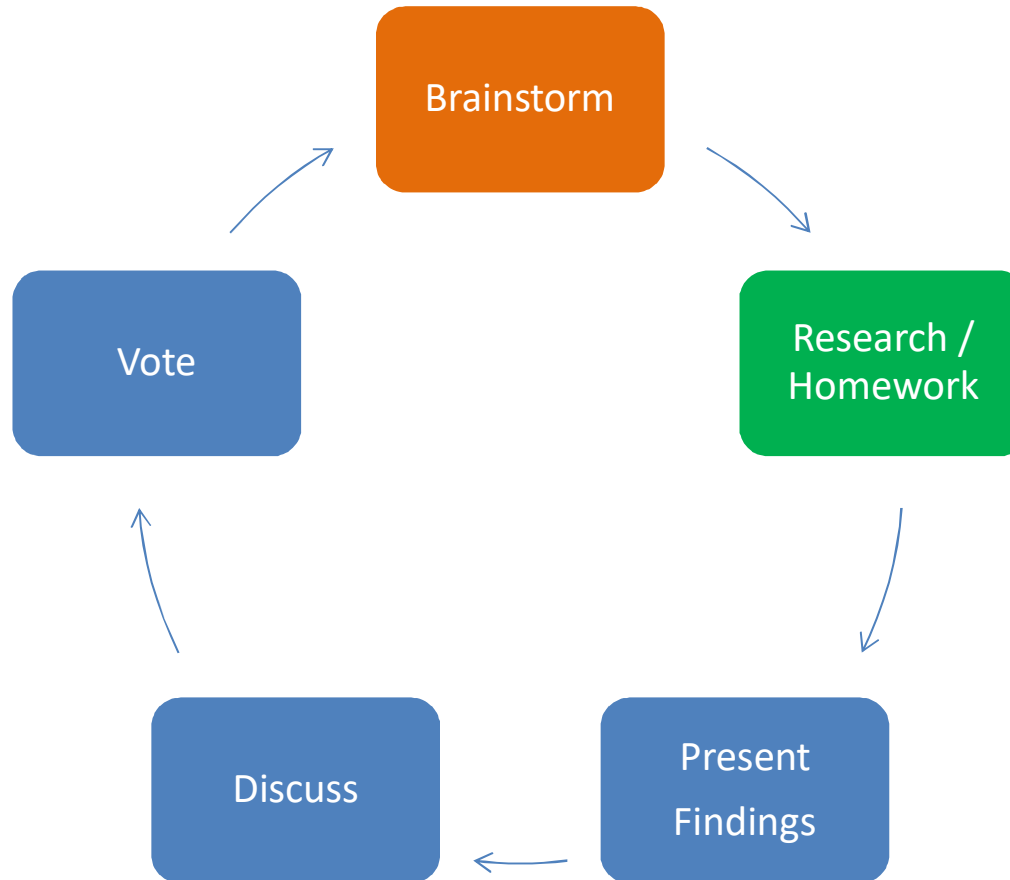
Team Number _____
Judging Room _____

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 team's areas of strength.

		Beginning	Developing	Accomplished	Exemplary
Research	Problem Identification *	Clear definition of the problem being studied			
	N	unclear; few details	partially clear; details missing	mostly clear; detailed	clear; very detailed
	D				
Research	Sources of Information	Quality and variety of data/evidence presented and of sources cited (e.g. books, magazines, websites, reports, professionals in the field and other resources)			
	N	minimal quality or variety limited	adequate quality and variety but did not include professionals	sufficient quality and variety including professionals	extensive quality and variety including multiple professionals
	D				
Research	Problem Analysis	Depth to which the problem was studied and analyzed by the team, including extent of analysis of existing solutions			
	N	minimal study; no team analysis	minimal study; some team analysis	sufficient study and analysis by team	extensive study and analysis by team
	D				
Comments					
Innovative Solution	Team Solution *	Clear explanation of the proposed solution and description of how it solves the problem			
	N	difficult to understand	some parts confusing	understandable	easy to understand by all
	D				
Innovative Solution	Innovation	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 with the potential to add value	original solution/application with the potential to add significant value
	D				
Innovative Solution	Solution Development	Use of a systematic process to develop the solution, where alternative solutions are considered and narrowed, the chosen solution is evaluated and improved, feasibility assessed, and factors for implementation analyzed (cost, ease of manufacturing, etc.)			
	N	organization AND explanation need improvement	organization OR explanation need improvement	systematic and well-explained, including evaluation or verification	Systematic and well-explained including evaluation or verification; implementation considered
	D				
Comments					
Presentation	Sharing*	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				
Presentation	Creativity	Imagination used to develop and deliver the presentation			
	N	minimally engaging OR unimaginative	engaging OR imaginative	engaging AND imaginative	very engaging AND exceptionally imaginative
	D				
Presentation	Presentation Effectiveness	Message delivery and organization of the presentation			
	N	unclear OR disorganized	partially clear; minimal organization	mostly clear; mostly organized	clear AND well organized
	D				

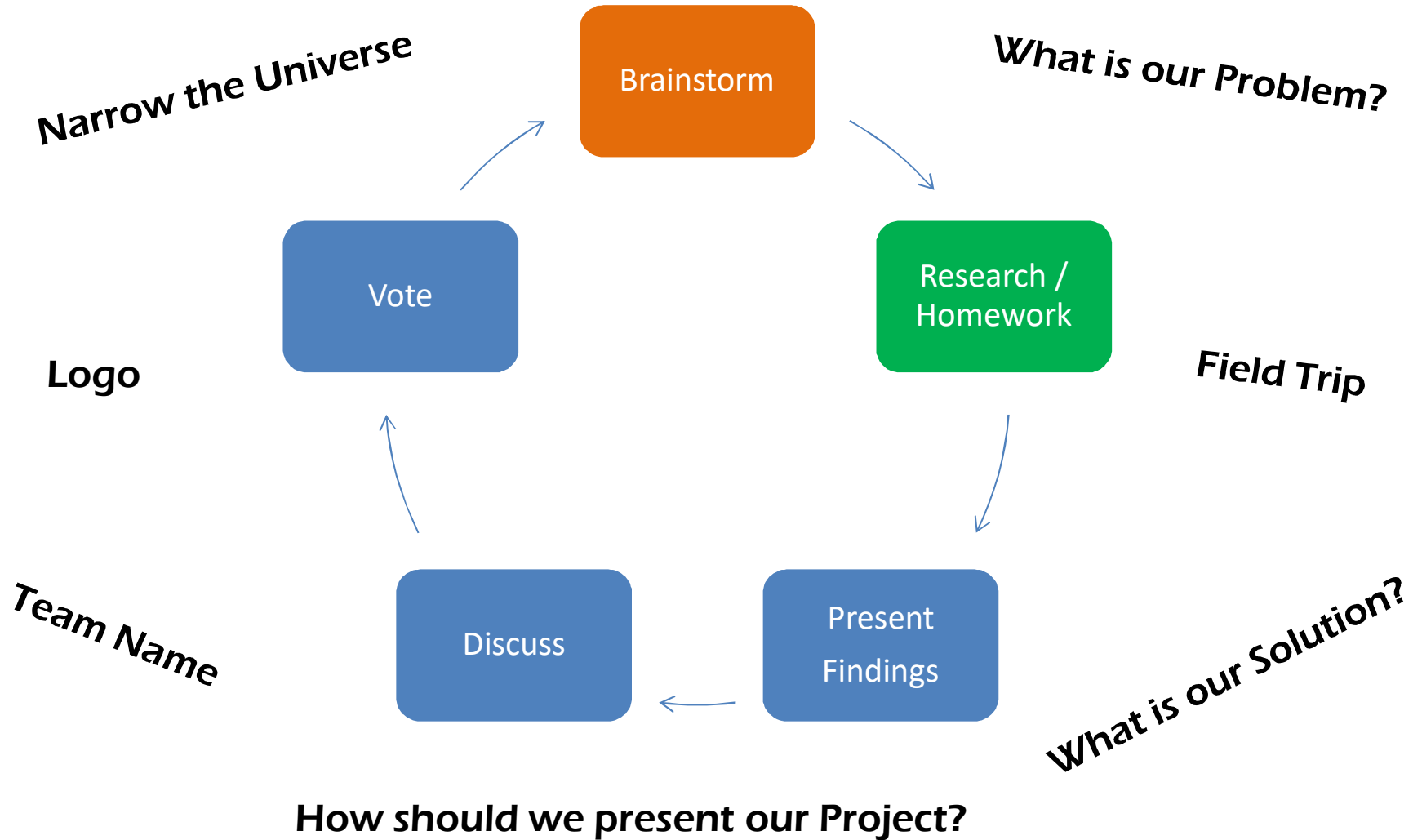


Find a Process that works for Your Team





We can use our Process for "Anything"





Core Values at the Heart of Our Process



We have FUN when we are creative

Brainstorm

**We DISCOVER
New Ideas
& Options**

Vote

Research /
Homework

**We make
Decisions as a
TEAM**

**Kids do the WORK ,
Coaches GUIDE
discussion**

Discuss

Present
Findings

Meetings prepare us to SHARE our Experiences



Preparing for Your Tournament



- “ Prepare all season long...document & save everything
- “ It takes longer than you think to create the Presentation
- “ Be self-contained...Do not expect to use ANYTHING in the judging room
- “ Present your Project to a team of friendly adults about 2 weeks before your tournament...give them your Rubric for evaluation
- “ You will never be as prepared as you WANT to be...you will be as ready as you NEED to be
- “ PRACTICE, PRACTICE, PRACTICE, PRACTICE, PRACTICE, PRACTICE, PRACTICE
- “ Ideal to have everything ready before your last meeting...we never did





Last Thoughts



- “ Everyone MUST work on the Project
- “ You won’t win without a good Project
- “ Not necessary to have a working prototype, but it helps the kids to have something physical when explaining the solution
- “ Share your project with at least 1 group!!!...feedback from a professional in a related field is best, but consider teachers, students, scouts, etc
- “ Volunteer to judge at an early (Dec) FLL Tournament & at States if your team does not qualify

If the kids aren’t having FUN, you aren’t doing it correctly... Engineering is EXCITING!