

# ***FIRST<sup>®</sup> LEGO<sup>®</sup> League***

# ***TUT******RIALS***

teach

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learn

## FEATURES OF A GOOD PRESENTATION

TEAM 3659 NeXT GEN

# ABOUT THE AUTHOR

- Middle school team from Garrett County, Maryland
- 13 years in FIRST LEGO League (including competing in International Tournaments)
- First place 2013 Global Innovation Award for the Gramma Jamma
- Top 20 GIA Semi-Finalist in 2017 for innovative solution, BeeHaven
- First Place Innovative Solution at Mountain State Invitational in 2017



# START WITH THE PROJECT RUBRIC

- Start by examining the FIRST LEGO League Innovation Project rubric.
- We recommend writing a script for the presentation that includes everything that is required in the Project Rubric.
- Highlight the 5 key areas – Identify, Design, Create, Iterate and Communicate
- You must cover all 5 areas in your 5 minute presentation
- You can watch our video of our research project presentation at <https://youtu.be/lbN3kgpQIOU> (Note: This video is for an older rubric)

BEGINNING 1	DEVELOPING 2	ACCOMPLISHED 3	EXCEEDS 4 <i>How has the team exceeded?</i>
<b>IDENTIFY</b> – Team had a clearly defined problem that was well researched.			
<input type="checkbox"/> Problem not clearly defined	<input type="checkbox"/> Partially clear definition of the problem	<input type="checkbox"/> Clear definition of the problem	<input type="checkbox"/>
<input type="checkbox"/> Minimal research	<input type="checkbox"/> Partial research from more than one source	<input type="checkbox"/> Clear, detailed research from a variety of sources	<input type="checkbox"/>
<b>DESIGN</b> – Team generated innovative ideas independently before selecting and planning which one to develop.			
<input type="checkbox"/> Minimal evidence of an inclusive selection process	<input type="checkbox"/> Partial evidence of an inclusive selection process	<input type="checkbox"/> Clear evidence of an inclusive selection process	<input type="checkbox"/>
<input type="checkbox"/> Minimal evidence of an effective plan	<input type="checkbox"/> Partial evidence of an effective plan	<input type="checkbox"/> Clear evidence of an effective plan	<input type="checkbox"/>
<b>CREATE</b> – Team developed an original idea or built on an existing one with a prototype model/drawing to represent their solution.			
<input type="checkbox"/> Minimal development of innovative solution	<input type="checkbox"/> Partial development of innovative solution	<input type="checkbox"/> Clear development of innovative solution	<input type="checkbox"/>
<input type="checkbox"/> Unclear model/drawing of solution	<input type="checkbox"/> Simple model/drawing that helps to share the solution	<input type="checkbox"/> Detailed model/drawing that helps to share the solution	<input type="checkbox"/>
<b>ITERATE</b> – Team shared their ideas, collected feedback, and included improvements in their solution.			
<input type="checkbox"/> Minimal sharing of their solution	<input type="checkbox"/> Shared their solution with user OR professional	<input type="checkbox"/> Shared their solution with user AND professional	<input type="checkbox"/>
<input type="checkbox"/> Minimal evidence of improvements in their solution	<input type="checkbox"/> Partial evidence of improvements in their solution	<input type="checkbox"/> Clear evidence of improvements in their solution	<input type="checkbox"/>
<b>COMMUNICATE</b> – Team shared a creative and effective presentation of their current solution and its impact on their users.			
<input type="checkbox"/> Presentation minimally engaging	<input type="checkbox"/> Presentation partially engaging	<input type="checkbox"/> Presentation engaging	<input type="checkbox"/>
<input type="checkbox"/> Solution and its potential impact on others unclear	<input type="checkbox"/> Solution and its potential impact on others partially clear	<input type="checkbox"/> Solution and its potential impact on others clear	<input type="checkbox"/>

# IDENTIFY

- Identifying a problem is the key step
- Teams often try to skip this step and pick a solution first
- Be sure you have a clear problem that you can articulate
- You need to be able to explain why the problem you picked fits the Challenge prompt for the year
- While the number of sources is not counted, judges are looking for a variety of high-quality sources

IDENTIFY – Team had a clearly defined problem that was well researched.				
<input type="checkbox"/> Problem not clearly defined	<input type="checkbox"/> Partially clear definition of the problem	<input type="checkbox"/> Clear definition of the problem	<input type="checkbox"/>	
<input type="checkbox"/> Minimal research	<input type="checkbox"/> Partial research from more than one source	<input type="checkbox"/> Clear, detailed research from a variety of sources	<input type="checkbox"/>	

# DESIGN

- This section asks teams to come up with multiple ideas before picking one
  - Share with your judges a few of the ideas and how you decided on one.
- You also need a plan. Plans can vary in type or style, but you need to communicate what your steps were after picking the project
  - How did you split the work? How did you decide where to research? How did you go about completing the work?

DESIGN – Team generated innovative ideas independently before selecting and planning which one to develop.				
<input type="checkbox"/> Minimal evidence of an inclusive selection process	<input type="checkbox"/> Partial evidence of an inclusive selection process	<input type="checkbox"/> Clear evidence of an inclusive selection process	<input type="checkbox"/>	
<input type="checkbox"/> Minimal evidence of an effective plan	<input type="checkbox"/> Partial evidence of an effective plan	<input type="checkbox"/> Clear evidence of an effective plan	<input type="checkbox"/>	

# CREATE

- While your solution does not have to be completely original (can be an improvement), you need to show that you spent time thinking about the solution
- Be prepared to share what it would take to make it a reality one day (have you thought of the materials, the costs, the process?)
- A prototype model or drawing is required. It can be made from anything (no restrictions). The more detailed your prototype, the higher you score.

CREATE – Team developed an original idea or built on an existing one with a prototype model/drawing to represent their solution.				
<input type="checkbox"/> Minimal development of innovative solution	<input type="checkbox"/> Partial development of innovative solution	<input type="checkbox"/> Clear development of innovative solution	<input type="checkbox"/>	
<input type="checkbox"/> Unclear model/drawing of solution	<input type="checkbox"/> Simple model/drawing that helps to share the solution	<input type="checkbox"/> Detailed model/drawing that helps to share the solution	<input type="checkbox"/>	

# ITERATE

- Iteration is a big component of the Innovation Project
- Share the solution with as many people as possible – an expert and a user will get you more points
- Get feedback and then improve your solution
- Be very clear on whom you shared with and how your solution changed as a result.

ITERATE – Team shared their ideas, collected feedback, and included improvements in their solution.				
<input type="checkbox"/> Minimal sharing of their solution	<input type="checkbox"/> Shared their solution with user OR professional	<input type="checkbox"/> Shared their solution with user AND professional	<input type="checkbox"/>	
<input type="checkbox"/> Minimal evidence of improvements in their solution	<input type="checkbox"/> Partial evidence of improvements in their solution	<input type="checkbox"/> Clear evidence of improvements in their solution	<input type="checkbox"/>	



# COMMUNICATE

- To earn the most points in this section, you must clearly and effectively communicate all aspects of the rubric including the solution and its impact
- Engaging presentations can be accomplished in many ways – some teams create a skit, for example
- Try to memorize your script instead of reading it. Keep the lines short so that they are easy to memorize.
- Make sure that everyone on the team participates.
- When a team member is giving their lines, the whole team needs to be engaged.



COMMUNICATE – Team shared a creative and effective presentation of their current solution and its impact on their users.				
<input type="checkbox"/> Presentation minimally engaging	<input type="checkbox"/> Presentation partially engaging	<input type="checkbox"/> Presentation engaging	<input type="checkbox"/>	
<input type="checkbox"/> Solution and its potential impact on others unclear	<input type="checkbox"/> Solution and its potential impact on others partially clear	<input type="checkbox"/> Solution and its potential impact on others clear	<input type="checkbox"/>	



# JUDGES' QUESTIONS



- After the presentation, judges ask questions. The judges may ask a specific team member or they may ask the whole team.
- Choosing a “captain” for that judging session can be useful. The captain helps direct the questions and makes sure everyone on the team answers a question.
  - The captain does have to answer a question, too.
  - Whoever is the captain needs to know what each team member is most comfortable talking about. For example, say the judges ask a question about the existing solutions and why they don’t work. The captain could say, “I know Sara researched that topic. Sara, would you like to answer the question?”
- You can give the judges additional information if they don’t have any questions.
- Everyone on the team needs to be able to answer questions and when a particular person is answering the entire team should be engaged

# DISPLAY BOARDS

- Having a display board at the pit area sparks conversation and can be useful if a judge visits. The team can bring this display board into judging as well.
  - The display board can be used to explain the team's research project.
  - We recommend using the research project rubric to help in the design layout of the board.
  - Draw the layout of the display board and plan out where certain information needs to be.
  - Include several photos of the team and the solution.
  - Typed descriptions enhance the look of the display board.

**Tip:** Use both sides of the board to allow for more information.



# TEAM NOTEBOOK

- A team notebook is a good way for other teams, judges, and visitors to get to know the team. The team can bring their notebook into judging to show the judges. It's nice way to remember the season, too.

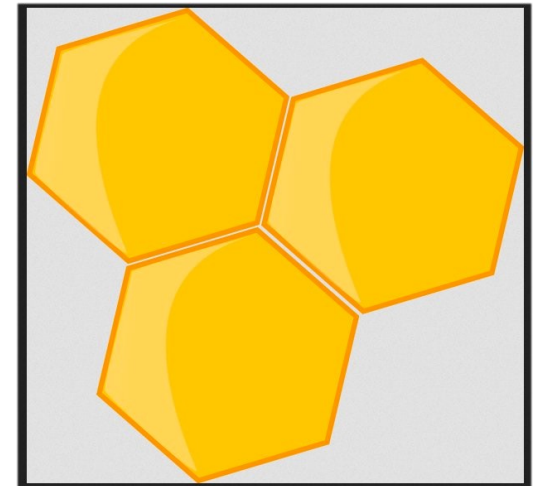


Here are some things you might include in your team notebook:

- Introduction to the team members/coaches/mentors
- Photos from competitions
- Information about the project
- Photos and description of the team sharing and demonstrating their project
- Documentation about the solution development
- Judges handouts (not allowed in some areas)
- Thank you letter to sponsors
- Marketing plan
- Newspaper articles about the team

# JUDGES HANDOUTS

- Teams can create handouts to give to their judges where allowed.
- Judges handouts can be used to highlight the main points of the team's presentation and to remind the judges of the team
- Design the judges handouts to be a quick reminder of the presentation
- Do not include long paragraphs explaining the team's project
- Consider the judging rubric when designing the judges handouts
- Be creative! For our Animal Allies season, we made hexagon shaped handouts to represent honeycomb since our project was related to bees.



# CREDITS

- This lesson was written by Team 3659 NeXT GEN
- You can contact Team 3659 NeXT GEN through their Facebook page: Garrett County FIRST LEGO League Team 3659.
- More lessons available at [www.ev3lessons.com](http://www.ev3lessons.com) and [www.flltutorials.com](http://www.flltutorials.com)



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