# Innovation Project Tips and Resources

Some material from **FLL Tutorials** 

Identify and Research a problem related to exploring the ocean.

FIRST Innovation Project Web Resources PDF

### Overview

## **Innovation Project**

More than 70% of the Earth's surface is covered by oceans. Explorers throughout history have searched and studied the oceans to understand the impact on our lives. Society's interest in the oceans has led to innovations in technology and a greater appreciation for

the complex relationship between life on land and under the sea. There is so much more to learn about marine life, ecosystems, and the effects humans have on ocean health.

# This season, your challenge is to dive into a problem faced by people who explore the oceans.

#### Start here...

#### Identify and research a problem related to exploring the oceans.

Read the Project Sparks to see if one of the problems outlined interests your team. The Challenge story might also give you some ideas. You can choose to design a solution for one of the problems listed or do some research to identify a different problem. Conduct research to explore existing solutions to the problem and to determine what challenges are still faced. You may want to create something new or improve on an existing solution; that's what innovation is all about.

You can research your problem any way you like, but try to use multiple sources. After your team has researched your selected problem, develop a plan to test your ideas. It might be necessary to change or update parts of your solution as you learn more from testing your ideas or sharing with others. You may even find that your ideas about exploring the oceans lead you to solutions applicable to life on land.

# Let the Rubric Drive the Project

**Identify** - Identify a problem, do background research, analyze existing solutions

**Design** – Think of different ideas, select one and come with a Project Plan

Create - Develop a solution including a prototype/model/drawing

**Iterate** - Share, test, and collect feedback on the solution and make improvements

**Communicate** - Create an effective and enthusiastic presentation for judges that explains your solution and its impact



Innovat	ion Proj	jec
---------	----------	-----

Team #	Team Name	Judging Room

#### Instructions

Teams should communicate to the judges their achievement in each of the following criteria. This rubric should be filled out according to the Innovation Project presentation.

Judges are required to tick one box on each separate row to indicate the level the team has achieved. If the team EXCEEDS, a short comment in the exceeds column is required.

BEGINNING 1	DEVELOPING 2	ACCOMPLISHED 3	EXCEEDS 4			
			How has the team exceeded?			
IDENTIFY – Team had a clearly defined problem that was well researched.						
Unclear definition of the problem	Partially clear definition of the problem	Clear definition of the problem				
Minimal evidence of research	Partial evidence of research from one or more sources	Clear, detailed research from a variety of sources	<b>©</b>			
DESIGN – Team worked together while creating a project plan and developing their ideas.						
Minimal evidence of an effective project plan	Partial evidence of an effective project plan	Clear evidence of an effective project plan				
Minimal evidence that development process involved all team members	Partial evidence that development process involved all team members	Clear evidence that development process involved all team members	<b>©</b>			
CREATE – Team developed an original idea or built on an existing one with a prototype model/drawing to represent their solution.						
Minimal explanation of innovation in solution	Simple explanation of innovation in solution	Detailed explanation of innovation in solution	<b>©</b>			
Unclear model/drawing that represents the solution	Simple model/drawing that represents the solution	Detailed model/drawing that represents the solution				
ITERATE – Team shared their ideas with others, collected feedback, and included improvements to their solution.						
Minimal sharing of their solution with others	Solution shared with at least one person/group	Solution shared with multiple people/groups				
Minimal evidence of improvements based on feedback	Partial evidence of improvements based on feedback	Clear evidence of improvements based on feedback				
COMMUNICATE – Team shared an effective presentation of their solution, its impact on others, and celebrated their team's progress.						
Unclear explanation of the solution and its potential impact on others	Partially clear explanation of solution and its potential impact on others	Clear explanation of solution and its potential impact on others				
Presentation shows minimal pride or enthusiasm for their work	Presentation shows partial pride or enthusiasm for their work	Presentation clearly shows pride or enthusiasm for their work				

Criteria on this page with this style of check box count dually toward Innovation Project and Core Values awards rankings

# Pick a Project that is Meaningful to the Team

- Always think of a problem first
- The problem can be as small or big as you want
- Most people relate better to local
  problems that impact their lives