

Topic	Voting	Pro	Con	Recommendation
Lego		6 Everyone likes it	Everyone knows about it already	
Lego Robotics		3 Not everyone knows	Everyone at competition would know about it	
Playing Video Games		2		
Fly Drone		2		
School		2		
Oragami		2		
Yoyo		2		
Frictionless Plns		1		
Trains		1		
Drawing		1		
Solving Rubric Cube		1		
New Ideas		0		
Robots		1		

Topic	Description		Voting
Lego Art	Enjoy the art	Ryder / Jacob	6
Lego Sell / Donate	Play and have fun at low cost		3
Lego Engineering Prototyping	Try out somethign without having really build it	Grayson / Marcel	4
Lego Robotics	Learn and have fun	Jackson / Camryn	5

Be A Lego	Influence other people to want to "be a lego" because there is more to it beyond just following the build instructions		
Core Values	How we share our own hobbies and interests with others can be an expression of our creative selves. People who work in the arts can teach us a lot about how to communicate, how to engage, and how to entertain an audience of any size. What can you learn from museums, theaters, and films that can help you share what you love to do?		
Innovation Project Description			
Topic	Questions	Answers / Responses / Artifacts	Links
Lego Art		Ryder / Jacob	
	What makes art...art	A creation, doesn't need to be original, Stimulate mind, cause different emotions	
	What is special about lego art	Unique because different people can have same pieces but come up with totally different things	
	How are legos themselves art	Different ways to combine them 2 d , 3 d	
	How can lego art make a difference	Influence people to start using them and be creative	
	What lego art will we reference	3D models, paintings with lego dots, combining to see something new	
	What lego art will we make	Sunset	
	What will we do with our lego art	Share it with other teams and ask them to re-imagine to be their own art	
	How can we create an immersive experience:	Ask them to build new lego art themselves	
	How will we get feedback and what will we do with it.	Ask the teams that we send to and present to	
	How does this category satisfy Core Values	Discovery, Innovation, Impact, Inclusion, Teamwork, Fun	
Lego Engineering Prototyping		Grayson / Marcel	
	What is Lego Engineering Prototyping?	Building something on a small scale to test if an idea works	https://bootcamp.uxdesign.cc/lego-prototyping-boosting-creativity-453be434a42
	Why is it useful, how does it make a difference	Save money and time. learn if things work on a small scale	
	What examples have we seen in the past	Robot Arm, Tree House, Clock, Crane	
	How could we use this in the future	Robot Arm - duplicating body parts are complicated and materials used such titanium are expensive so this helps to try out designs before doing it for real	
		Clock - it's hard to keep accurate time. Before building a clock out of metal wood or something else taking lots of time the lego clock could test out if the design works	
		Crane - building a giant crane that can pick up heavy objects requires a lot of engineering. Lego prototype can determine the math if certain structures can pick up certain weights when scaled up.	
		Tree House - before trying to see what branches can hold weight of rooms and if branches will allow for big rooms for people to fit a lego tree house can help test these out.	
	Should we build an example?	Yes	
	What will our example show?	Demonstrates how you can check a building design that is stable or easy to break.	
	How can we create an immersive experience:	Allow people to learn what a stable building looks like by testing its stability against a ping pong ball	
	How will we get feedback and what will we do with it.	Asked ??? about it and incorporated recommendations ab.	
	How does this category satisfy Core Values	Discovery, Innovation, Impact, Inclusion, Teamwork, Fun	
Lego Robotics		Jackson / Camryn	
	What is this	FLL and all that comes with it, Something that "does something" without human intervention does tasks, solves problems autonomously	
	What can you do with this	Perform tasks, teach, compete against each other	
	Why is lego robotics more than just a lego in a kit	Teach you skills and that the whole is bigger than the parts	
	Why is it useful, how does it make a difference	teach about robots, have fun	
	What examples have we seen in the past even outside of FIRST	https://www.fastcompany.com/3029011/these-lego-robots-solve-real-world-problems	
		https://hbr.org/2014/04/why-your-employees-should-be-playing-with-lego-robots	
	How could we use this in the future		
	Providing an example?		
	What will we do with the lego robot example		
	How can we create an immersive experience:		
	How will we get feedback and what will we do with it.		
	How does this category satisfy Core Values		



START

How can you use technology and the arts to help engage others or increase participation in what you love to do?

→ **Identify a specific problem related to sharing your hobbies or interests.**

Performing. Reading. Collecting. Skateboarding. Your hobbies and interests might be different from your friends'. Can you teach people about your hobby in a way that makes it fun and engaging?

→ **Research your problem and solution ideas.**

Explore the many ways people share their interests with others. Using the arts as a guide, think about creative ways you could teach people about what you love to do. Can you find a fun way to get more people interested in your hobby? How can you use technology to make learning about your interests more immersive? Are there any experts you could interview?

→ **Design and create a solution that helps people learn about your passions!**

Use your research and explorations to either improve an existing way your hobby is shared or design a new innovative way to share! Can you think of any technology that could be used in a new or creative way? Make a drawing, model, or prototype of your solution.

→ **Share your ideas, collect feedback, and iterate on your solution.**

The more you iterate and develop your ideas, the more you will learn. What impact will your solution have on your audience?

→ **Communicate your solution with a live presentation at an event.**

Prepare a creative and effective presentation that clearly explains your innovation project solution and its impact on others. Make sure your whole team is involved in sharing your progress.

Use your critical thinking and innovation to inspire others to learn and be entertained with *FIRST® IN SHOWSM*

