



EduTrend Contents

EDUTECH · ROBOTICS COMPETITIONS AND CHALLENGES · HIGH SCHOOL

Innovation Pitch

Research a problem and pitch a robotics solution to judges

Ages 15–18

Level: Advanced

90 minutes

Teams of 3

Activity 05

Inside: activity at a glance · step-by-step session plan · facilitator notes · 3 student worksheets · assessment checklist

ACTIVITY 05 · AT A GLANCE

Innovation Pitch

Many competitions include an innovation or research element. Teams choose a problem linked to a theme, such as food waste, research it using credible sources, design a robotics solution with a simple prototype or model, and prepare a five-minute pitch. A panel scores problem, research, solution, feasibility and teamwork.

Learning outcomes

By the end of the session students can:

- research a real problem;
- design a feasible solution;
- build evidence into a pitch;
- respond to judges' questions.

KEY WORDS

innovation · research · feasibility ·
prototype · pitch · rubric

CURRICULUM LINKS

Geography and science: real-world problems. English: persuasive speaking. Business: pitching.

1**SENSE**

What can it detect?

2**THINK**

What should it
decide?

3**ACT**

What should it do?

4**TEST**

Run it

5**DEBUG**

Find and fix

6**IMPROVE**

Make it better

Materials (per team)

- Research sources
- Prototype materials or kits
- Pitch template
- Judging rubric
- Worksheets 1, 2 and 3

Before the session

- Choose a theme.
- Prepare the rubric.
- Invite a panel.
- Print worksheets.

SAFETY

Cite sources. Get approval for any practical prototype.

ACTIVITY 05 · SESSION PLAN

Step by step

Push teams to show evidence that the problem is real and that users would want the solution.

Time	What happens	Say or ask
0–15 min Theme	Introduce the theme.	<i>“What problems exist?”</i>
15–40 min Research	Find credible evidence.	<i>“How big is the problem?”</i>
40–60 min Design	Solution and model.	<i>“Is it feasible?”</i>
60–75 min Pitch prep	Structure the pitch.	<i>“What is the key message?”</i>
75–90 min Pitch	Present and answer questions.	<i>“What did judges question?”</i>

CHALLENGE CARD (print or copy onto the board)

Research a real problem, design a feasible robotics solution and pitch it to a panel with evidence, answering their questions.

ACTIVITY 05 · FACILITATOR NOTES

The competition know-how in brief

Competitions such as FIRST LEGO League include an innovation project, and the World Robot Olympiad has a Future Innovators category where teams design a robotics solution to a theme.

A strong pitch shows evidence that the problem is real, explains how the solution works, discusses feasibility and costs, and shows user feedback.

Common ideas to listen for

- “A cool idea is enough.” Evidence matters.
- “More technology is better.” Feasibility matters.
- “Judges want perfect answers.” They value honest reasoning.

Adapting the activity

Support

Provide a pitch structure.

Stretch

Include a cost estimate and user interview.

WORKSHEET 1

Research

Name: _____

Class: _____ Date: _____

Record evidence.

Research

Source	Key fact	Credibility
1		
2		
3		
4		

WORKSHEET 2

Pitch plan

Structure your pitch.

Pitch plan

Section	Key points
Problem	
Evidence	
Solution	
Feasibility	
Ask	

WORKSHEET 3

Judge feedback

Record and respond.

Questions asked and how we would improve

FOR THE TEACHER

Assessment checklist

Use during the session. One sheet covers up to eight students; copy as needed.

Student	Uses evidence	Designs feasibly	Pitches clearly

Suggested codes: W = working towards · E = expected · G = greater depth

ABOUT THIS ACTIVITY

Innovation Pitch is a sample activity from the EduTrend Contents Edutech Robotics Competitions and Challenges programme (high school, level: advanced). Every activity in the programme follows the same format: a practical challenge, a clear session plan, facilitator notes and ready-to-print worksheets, so that teachers, club leaders and parents can run it without extra preparation.

Full 15-, 20- and 32-week programmes are available from EduStore at edutrend.org.

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