Transforming a Science Day Investigation to an Ohio STEP Project

The Ohio Academy of Science

What We Will Cover

- What is The Difference Between Science Day and Ohio STEP?
- How Many of the Sections of the Innovation Canvas Have You Already Completed With Your Science Day Project?
- Assessing the Commercial Opportunities of Your Research
- What Additional Information Do You Need To Complete?
- Benefits to participating in both!

What is The Difference Between Science Day and Ohio STEP?

Science Day

Introduces students to methods and processes used in science and how these approaches are used to discover new knowledge and solve problems.

Ohio STEP

Introduces students to the intersection of STEM innovation and entrepreneurship and equips students with the mindset, skills, and knowledge to navigate the market landscapes of the entrepreneurial world.

Commercialization of Scientific Research

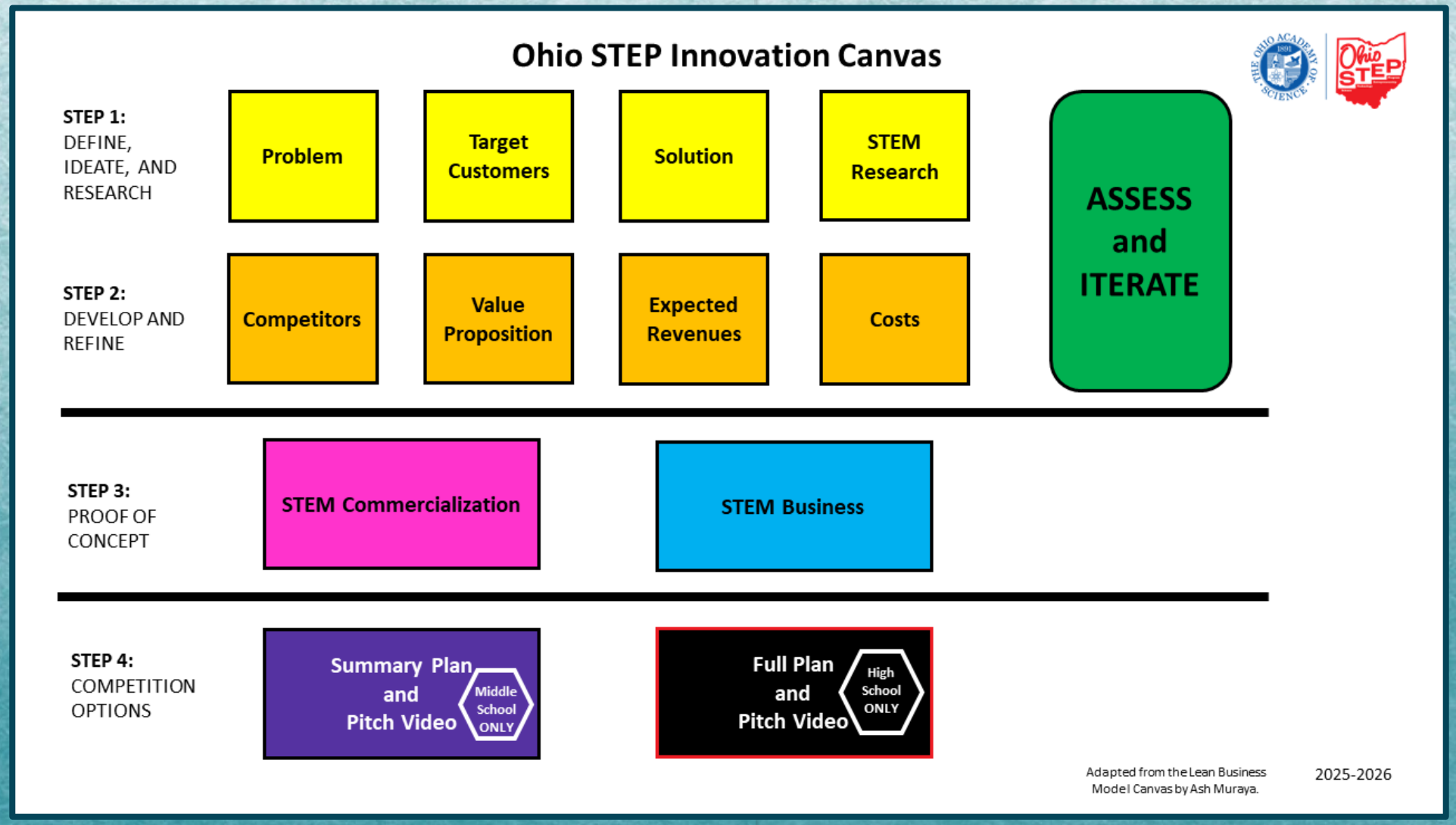
Research: Observations and experiments during research activities often lead to discoveries and inventions.

Research commercialization is the process of transforming scientific discoveries and innovations into marketable products, services, or technologies that generate economic value. This involves moving research findings from laboratory settings through development stages to reach end users in commercial markets.

https://waitro.org/blog/how-do-research-institutes-commercialize-their-discoveries/

WAITRO WORLD ASSOCIATION of INDUSTRIAL & TECHNOLOGICAL RESEARCH ORGANIZATIONS

How Many of the Sections of the Innovation Canvas Have You Completed With Your Science Day Project?



How Many of the Sections of the Innovation Canvas Have You Already Completed With Your Science Day Project?

Scientific Method or Meta Analysis:

1. Identified a question or problem
2. Created your hypothesis
3. Conducted background research

Engineering Design:

1. Identified a problem
2. Developed a solution
3. Conducted background research
4. Designed a prototype

Assessing the Commercial Opportunities of Your Research

Scientific Method or Meta Analysis:

- Review the research and discussion/conclusion sections of your Science Day report.
- Can you apply your findings to create an innovative product or service?
- Can you apply them to create an improvement on an existing product or serve?

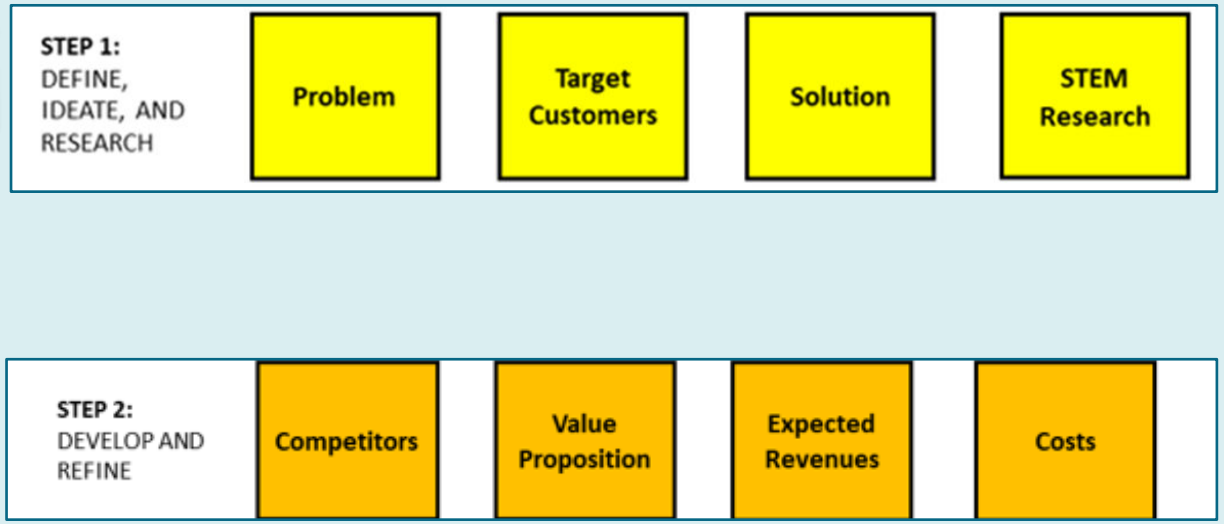
Engineering Design:

- Review the research and discussion/conclusion sections of your Science Day report.
- Have you clearly identified a problem or market opportunity?
- Have you proposed an innovative solution or an improvement on an existing solution?

What Additional Information Do You Need To Complete?

Review each "Ohio STEP Section" and make sure you have addressed any "Action Step" not already included in your Science Day project.

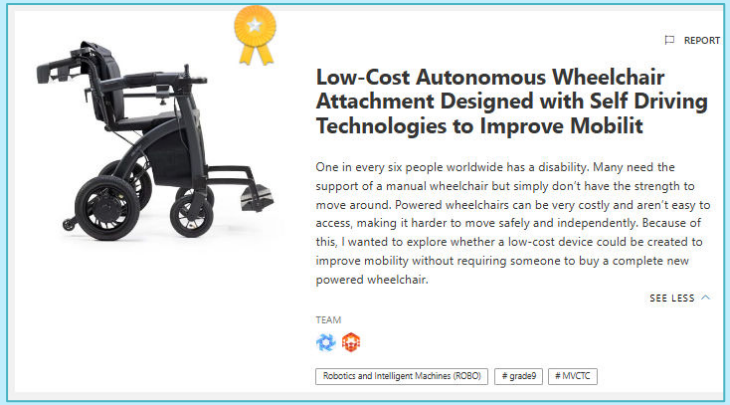
- "Target Customer" Section
- "Solution and STEM Research" Sections
- Focus on STEP 2 of the Innovation Canvas which is the market feasibility section of Ohio STEP.

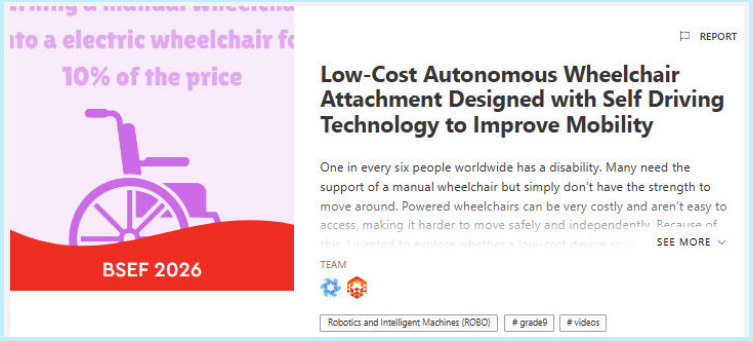


Examples of Science Day → Ohio STEP Projects

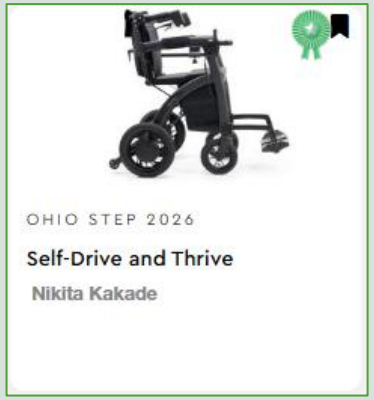
Nikita Kakade

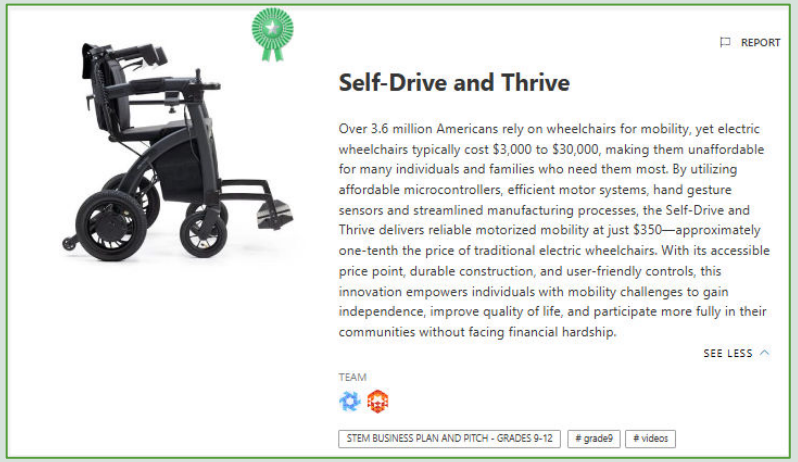
Science Day Engineering Design





Ohio STEP STEM Business Plan

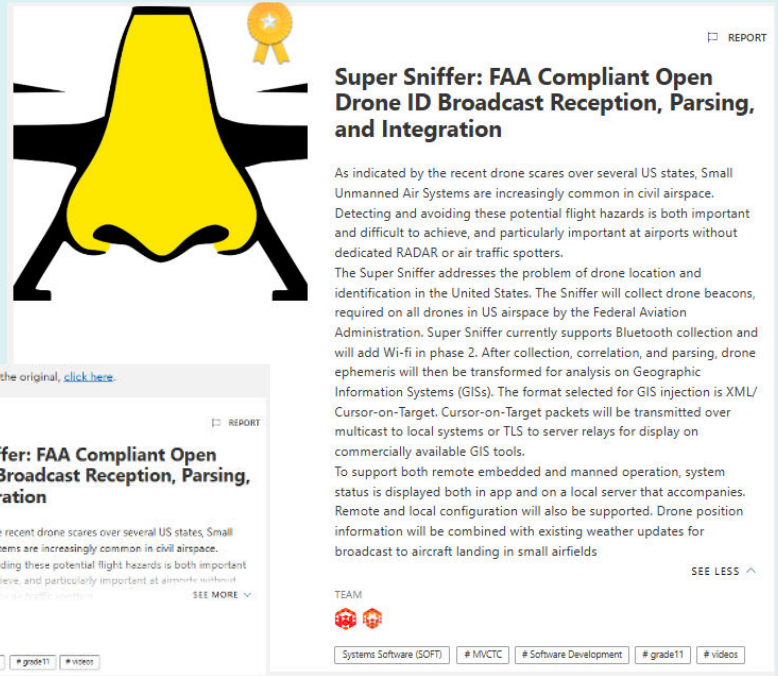


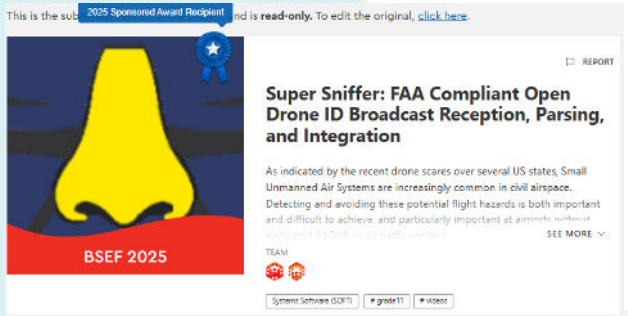


Examples of Science Day → Ohio STEP Projects

Charlie Pochet

Science Day Hypothesis Based Project





Charlie Pochet and Paul Cook

Ohio STEP STEM Commercialization Plan

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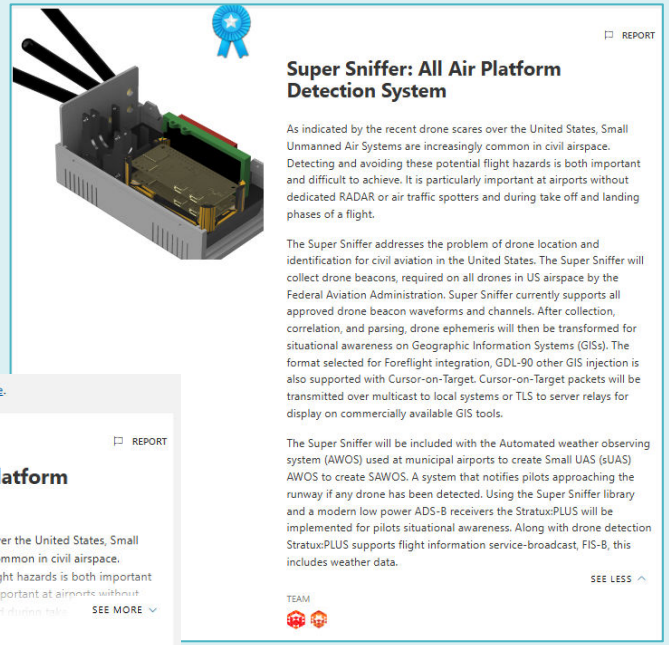
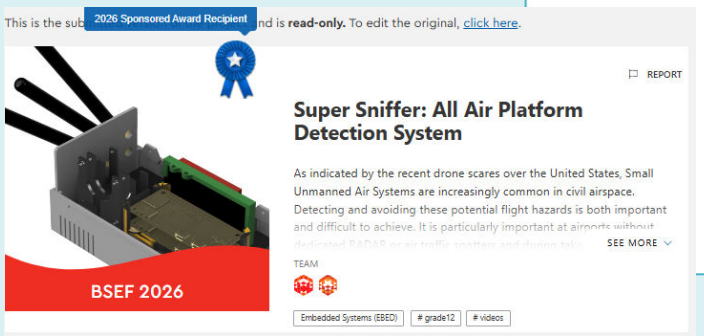


CONTINUATION PROJECT



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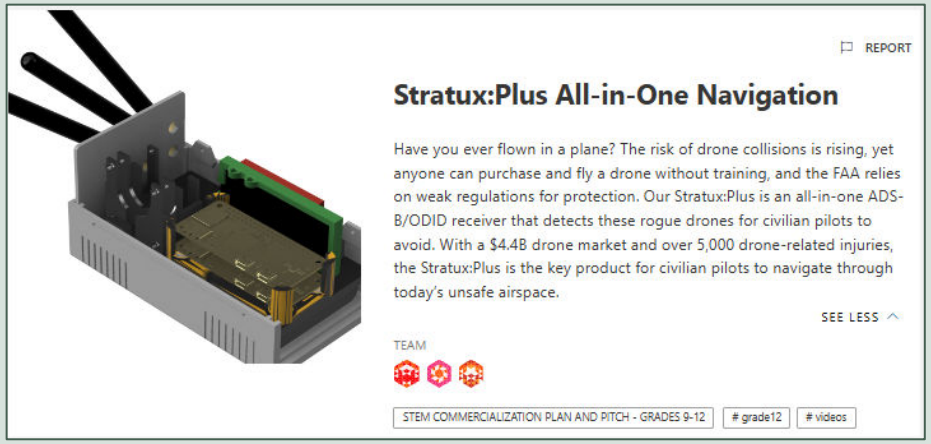
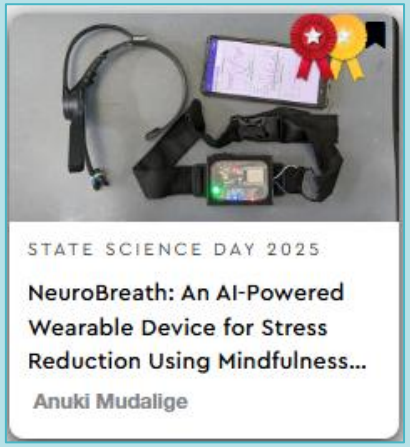
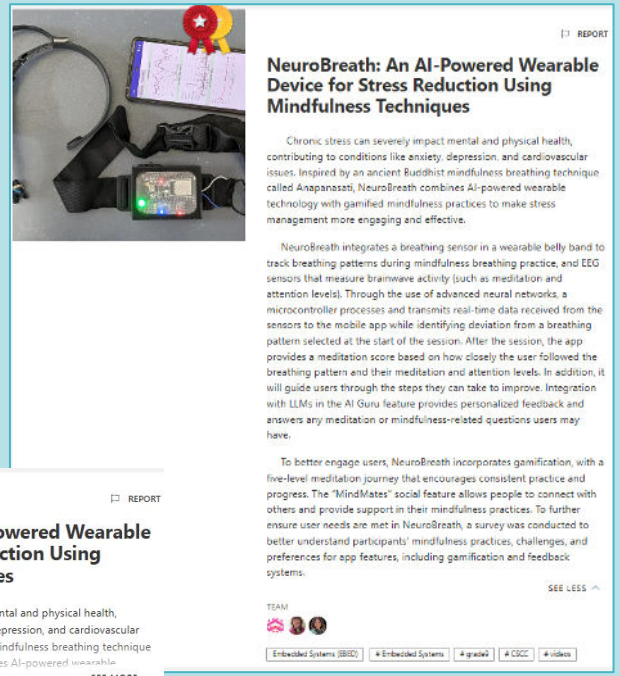


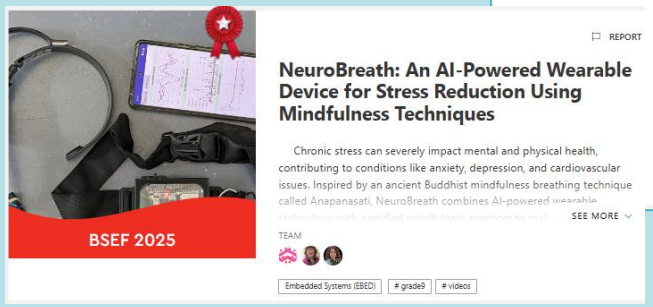
Examples of Science Day → Ohio STEP Projects

Anuki Mudalige

Science Day Engineering Design







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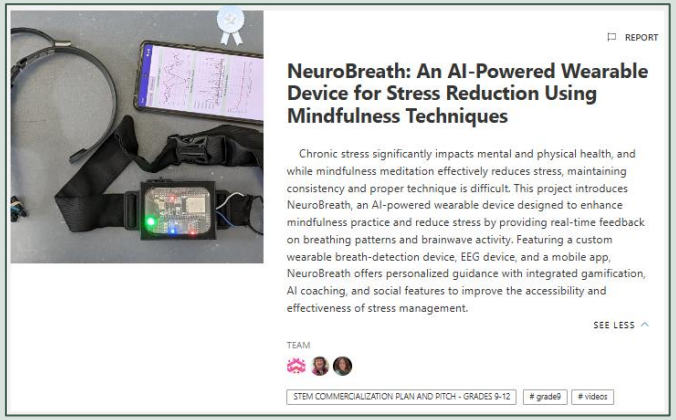

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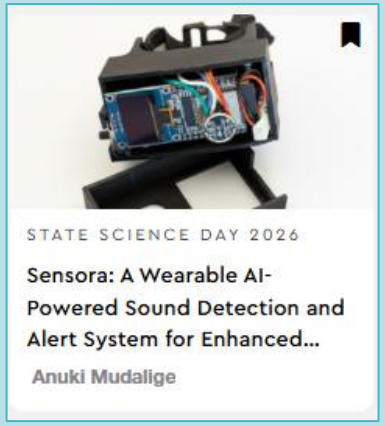

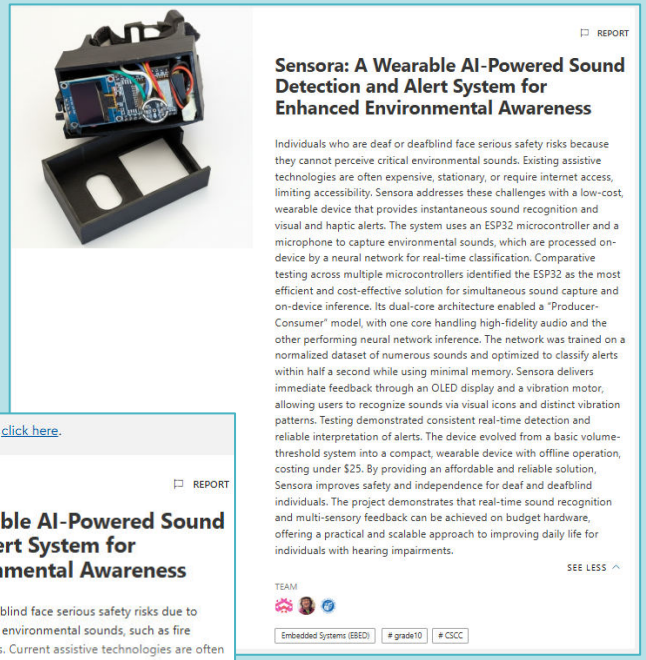

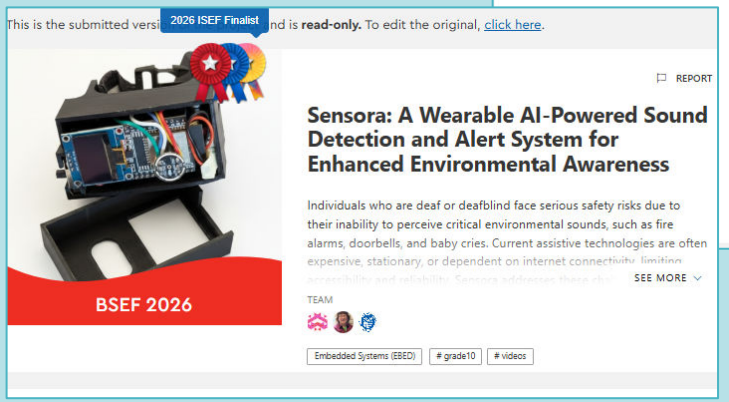

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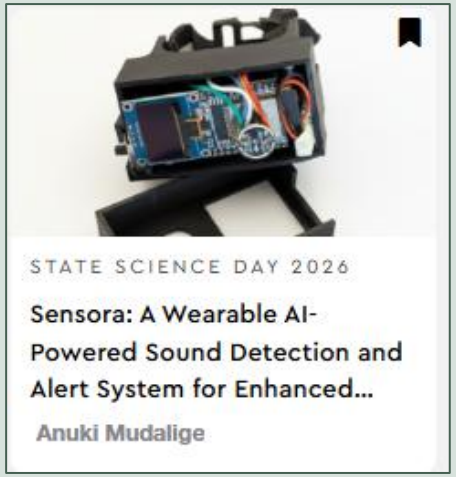

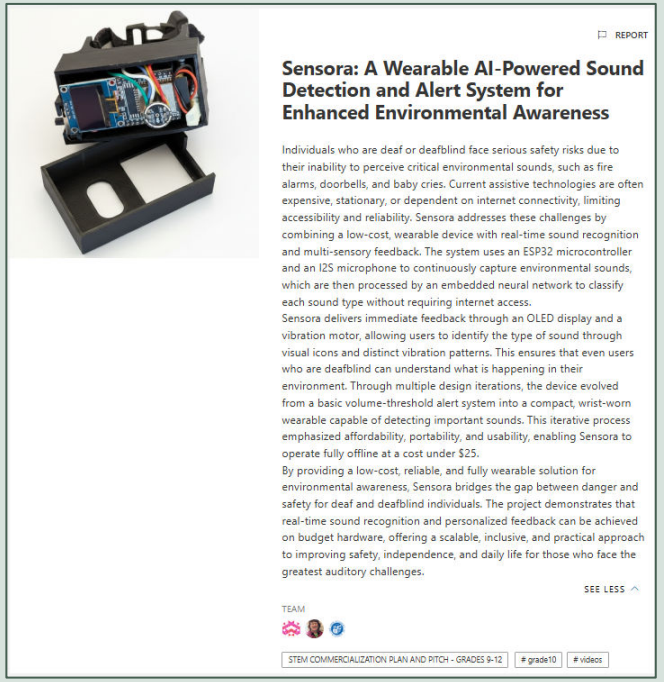

Benefits to participating in both!

Short Term Benefits:

- Cash awards and scholarships are available at successive competition levels.
- These projects provide students with opportunities to explore potential career pathways.

Long Term Benefits:

- These programs are positive additions to any application or resume.
- Scholarships and cash awards can help students meet their post-secondary education goals!

Questions?

The Ohio Academy of Science

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https://partner.projectboard.world/oas/