

# How to Transform Science Day Projects into Believe in Ohio Plans





# Why participate in both?

# Believe in Ohio

**Science day** projects increase your interest and understanding of science, provide career exploration opportunities, and can recognize your achievements in the sciences.

**Believe in Ohio** plans emphasize the importance of STEM, and the need to develop critical thinking, problem-solving skills, and an entrepreneurial mindset.

## What are key requirements?

**Science Day** projects integrate into one functional activity – the skills and arts that are usually taught separately – resulting in a cross-discipline demonstration in skills like writing, math, graphic arts, scientific methodology and public speaking.

**Believe in Ohio** plans introduces college and workplace experiences – using concepts of entrepreneurship, developing problem solving, critical thinking, and collaboration skills in development of a commercialization or business plan.

# What's different?

Both begin with the identification of a problem or need.

**Science Day** projects test a hypothesis, complete research, test, collect and analyze data to state a conclusion.

**Believe in Ohio** plans develop a written "science & technology proof of concept" with both a persuasive science and technology assessment and a plan for the concept's likely commercial feasibility and viability.





Components of Science Research Projects vs. Believe in Ohio Projects	
<b>Components of ALL Science Research Projects</b>	Components of Believe in Ohio Projects
An Identified Problem and a Hypothesis or Engineering Design Statement	Milepost 1: Describe the Problem or Market Opportunity
Reserarch Plan and Project Data Book/Notebook	Milepost 2: Describe the Proposed Solution to the Problem or Market Opoortunity
Detailed Research Report including an Abstract	Milepost 3: Describe and Summarize the STEM Concepts and Principles that underly your Solution
Physical Display	Milepost 4: Decribe the Target Customers and Intended Users
Oral Presentation	Milepost 5: Discuss your Direct and Indirect Competitors and their Products
	Milepost 6: Describe your Customer Value Proposition and how it provides a Competitive Advantage?
	Milepost 7: Describe your Expected Revenue Streams
	Milepost 8: Discuss your Expected Startup and Operating Costs
	Milepost 9A: Develop a Science and Technology Proof of Concept for a STEM Commercialization Plan
	Milepost 9B: Develop a Business and Financial Proof of Concept for a STEM Business Plan
	Milepost 10: Prepare an Executive Summary and Elevator Pitch of your entire Plan

#### Give me an example.

Many but not all Science Day projects can be used for Believe in Ohio plans.

Ex. 1: A project which compares methods/products to clean various surfaces and for which the student researcher has identified a testable variable, will probably meet the requirements to present the project at a Science Day. However, no new method or product has been introduced, so there is nothing new to commercialize.

Ex 2: If the project introduces a student researcher newly developed method/product for cleaning, compares these to existing methods/ products, and if the new method/product proves to be an improvement in results, then there may be something to commercialize and the project could move from a Science Day project to a *Believe in Ohio* project.

### **Considerations for Believe in Ohio Plans**

Not all Believe in Ohio projects follow the scientific method for a testable hypothesis. Many commercialization projects require the development of concepts, identifying target customers, users and competitors, and quantifying costs and expected revenues without testing a hypothesis, or developing and testing a prototype.

Short Term Benefits: Both Science Day and Believe in Ohio projects provide opportunities for student awards! Cash awards and scholarships are available at successive competition levels, but vary somewhat in each program.

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Long Term Benefits: Both programs are recognized as positive additions to any application or résumé, and scholarships can help students meet their post-secondary educational goals!

### Contact your Regional STEM Advocate or go to: www.ohiosci.org to learn more!

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