

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



Why participate in both?



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 feasi-

Component Comparison:

Components of Science Research Projects vs. Believe in Ohio projects

Components of ALL Science Research Projects	Components of Believe in Ohio projects
An Identified Problem and a Hypothesis or Engineering Design Statement	Milepost 1 – Describe the Problem or Market Opportunity
Research Plan and Project Data Book/Notebook	Milepost 2 – Describe the proposed solution to the problem or market opportunity
Detailed Research Report including an Abstract	Milepost 3 – Describe the key STEM concept(s) & developments that will be applied
Physical Display	Milepost 4 – Describe the target customers and users
Oral Presentation	Milepost 5 – Discuss who your competitors are or might be
	Milepost 6 – Describe the Customer Value Proposition and Competitive Advantage of your proposed solution
	Milepost 7 – Discuss what revenue streams you expect
	Milepost 8 – What startup and operating cost do you expect to incur?
	Milepost 9 – Summarize the STEM concepts & principles underlying your solution
	Milepost 10 – Summarize in writing your commercialization assessment of your plan
	Milepost 11 A – If yours is a STEM Commercialization Plan, develop a science and technology proof of concept
	Milepost 11 B – If yours is a STEM Business Plan, develop a business and financial proof of concept:
	Milepost 12 – Prepare an Executive Summary and Elevator Pitch of your entire plan.

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 BiO 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 awards. *BiO* also provides an opportunity for scholarship awards in the regional and state competitions.

Long Term Benefits: Both programs are recognized as positive additions to any application or résumé.

For More Information

Go to: believeinohio.org

Northwest (blue)

Jenna Pollock

jpollock@ohiosci.org

Northeast/East (yellow)

Sheila Cubick

scubick@ohiosci.org

(330) 718-0186

Southwest (orange)

Angela McMurry

amcmurry@ohiosci.org

(937) 760-1771

Northeast/West (purple)

Laurie Godfrey

lgodfrey@ohiosci.org

(216) 990-5921

Central (green)

Laura Brennan

lbrennan@ohiosci.org

(614) 581-6629

Southeast (red)

Pamela Wilson, PhD

pwilson@ohiosci.org

(614) 736-6656

