



The Ohio Academy of Science

Agenda: A Deep Dive into Ohio STEP



8-hour Professional Development Workshop

Check-in 9:00 – 9:30

9:30 – 10:00 Welcome and OAS Overview

- Welcome and introductions.
- Ice Breaker - who are our participants?
- What do these have in common?
- About the Academy
- Overview of our Programs: Science Day and Ohio STEP
- Competitions
- ProjectBoard
- Benefits

10:00 – 10:20 Introduction to Ohio STEP

- Innovation Canvas: modeled on Lean Business Model Canvas and integrated with Design Thinking
- Pathways: (Summary, Commercialization, Business) Workbooks

10:20 – 11:30 Step 1: Problem and Target Customer

Design Thinking

- **What is Design Thinking?**
- Design Thinking Mindsets
- Creative Confidence
- Fixed vs. Growth Mindset
- Design Thinking Process
- **Empathize and Define**
- How to Empathize
- **Activity—Empathy Interviews –Empathy Map Worksheet**
- Define Problem
- Write Problem Statement - **Problem Statement Worksheet**
- **Ideation**
- Steps to Ideation
- Rules for Brainstorming
- **Activity- Ideate –MindMap Worksheet**

11:30 –12:30 Working Lunch: (1 hr)

Finding Answers and Resources: A Walk Through ProjectBoard

- **Activity: PB Resources Scavenger Hunt**

12:30-2:00 Step 1: Solution/STEM Research

- STEM and Research
- AI Platforms for Research
- OAS AI Policy
- Elements of an AI Prompt
- Elements of an AI Prompt: Quick Guide
- **Activity 5: AI Prompts for Holo Generator**
- **Activity 5: AI Results for Holo Generator**
- **Activity 5: Repeating the AI Search for the Holo Generator STEM Research**
- **Activity 6: AI STEM Research**
- Research Source Links
- How to Cite Sources

2:00 – 2:15

Refining the Target Customer

- Understanding the Difference Between: Target Customers and Intended Users
- **Activity: Who are your target customers and intended users?**
- **Activity: Determine the Population of your target customers**

2:15– 3:15 Step 2: Determining Market Feasibility

Competitors and Value Proposition

- **Activity – Finding Competitors**
- Benefits of Competition in Business
- What is Customer Value and Competitive Advantage?
- **Activity – Value Proposition and Competitive Advantage**

Expected Revenue and Costs

- **Activity – Research and List Revenue Streams**
- **Activity – Start Up and Operating Costs –Worksheet**

3:15-3:30 Break

3:30 – 5:00 Step 3: Proof of Concept and Pitch

Proof of Concept:

- Requirements for each pathway: STEM Commercialization and STEM Business Plans

Project Evaluation: Pitching and Presenting

- Introduce Pitch Guidelines – emphasize the difference between a pitch, presentation, and a commercial in the video; update the guidelines and video guidelines for this.
- What is an Elevator Pitch?
- Pitch Guidelines Pitch Builder
- Pitch Guidelines written Elevator Pitch.
- Judging Card for Pitch – [Pitch Judging Handout](#)
- View Pitch Videos then judge them.
- Discuss scores they would give.
- One or more groups to pitch their ideas.

5:00 – 5:15 Integrating Ohio STEP in the Classroom

- **Within Content Areas:** Environmental Science Examples
- **OAS Project Extensions:** Examples of converted and cross-over projects.
 - Science Day to Ohio STEP Project Transitions
 - OAS/OSLN Crosswalk
 - **Ohio STEP**
 - **Science Day**

5:15- 5:30 Wrap Up:

- Reflection and Questions