

## Co-Design Session: Working Collectively for Change (12:30-1:30)

This question was asked during registration:

“From your perspective as an educator, industry professional, funder or STEM advocate, what is a big challenge/obstacle you face, and would like help solving? (if it's funding, please be specific)”.

### Response Summary

These responses reveal interconnected challenges across three areas: **Student Learning Pathways, Access to Resources, and Educator/Family Support.** Today's groups will tackle specific aspects of each.

#### 1. Funding for Implementation and Expansion

- **Specific Program Funding:** After-school, libraries and schools
- **Systemic Funding:** Find funding outside of school budgets
- **The "Three-Legged Stool":** Funding, Mentors, Student access

#### 2. Program Innovation and Flexibility

- **Systemic Constraints:** Innovation solutions within the system
- **Embed STEM:** Throughout the day, and afterschool
- **Infrastructure and Training:** Proper training, PD, support
- **Resources:** Materials, core equipment & physical space

We will work together to address some of these challenges.

**March (NJ STEM MONTH):** Show progress, however small, towards achieving a solution(s) to these challenges.

---

### Today's Plan of Action

1. People will self-identify their interest and break into groups, which we will scatter throughout the large ballroom.
2. Each group will address one of the challenges listed below.
3. Discuss and document BARRIERS that hinder success.
4. Discuss and document ENABLERS that can create opportunities for success.
5. Identify at least ONE concrete action or commitment that ecosystem members can complete by NJ STEM Month (March)—this could be a meeting held, a partnership formed, a plan drafted, or progress toward a solution.
6. Identify the trajectory and next steps for the next 6-12 months—what could reasonably be underway or achieved during this timeframe?
7. Attendees can self-identify their interest to be a part of a working group to continue addressing the challenge.

---

### Group Collaboration Guidelines

- Today's exercise should generate ideas and potential solutions. There are no 'right or wrong' choices or answers
- Embrace all ideas. A "Yes and" mindset will open more ideas, where the best ideas will rise to the top
- Remember to consider how sectors interact:
  - **Education + Business:** Co-design curricula and PD based on real-time labor market data
  - **Business + Community:** Create accessible career exploration and mentorship programs
  - **Education + Community:** Develop wrap-around services supporting student success
  - **All Stakeholders:** Build industry-driven sector strategies that promote economic mobility

### Additional Thinking Prompts

- What is needed? What already exists? How do we achieve our goal through collective impact?
- Think UPSTREAM. What challenges could be made earlier for bigger impact (ie butterfly effect)?
- Make sure to think about measuring success, if you have time.

**CHOOSE ONE OF EIGHT GROUP TO JOIN FOR 12:30-1:30 SESSION****Creating the Steps to Success**

Attendees can participate in one of the following groups (they will be conducted concurrently in the large ballroom). It is HIGHLY ENCOURAGED that people from the same organizations participate in different groups, and that each group has a mix of different sectors (school, OST, business, community, providers etc) so a variety of perspectives and thoughts are included.

This work will be collected, analyzed and shared with our community. We hope people will continue involvement through working groups that are formed (you are not bound by your participation group) .

**Student STEM & Career-Connected Learning Journey****Group A: Developing Persistence in Young Students to Envision STEM Careers**

How do we help young students develop the persistence and self-perception to envision themselves in STEM careers? What are the barriers preventing this, and what enablers can support it—considering the roles educators, families, community organizations, and business/industry can each play?

**Group B: STEM and Career-Connected Program Implementation**

How do we create more authentic and accessible learning opportunities for middle and high school students to become aware of STEM careers and experience them firsthand? What are the barriers preventing this, and what enablers can support it—considering the roles educators, families, community organizations, and business/industry can each play?

**Group C: Creating Bridges to Higher Levels of Education & Opportunity**

How do we increase student awareness, opportunities, and accessibility to dual enrollment, pre-college programs, internships, and capstone projects? What are the barriers preventing equitable access to these pathways, and what enablers can support them—considering how business/industry, educators, and institutions can help students navigate careers and technologies that are rapidly evolving?

**Rethinking Access to STEM Materials and Resources****Group D: Rethinking STEM Learning & Creating Small “Moments of Impact” through a Student’s Entire Day**

How do we create more 'moments of impact' by integrating STEM learning across the student's entire day—in different school subjects, out-of-school time activities, and at home? What are the barriers preventing this integration, and what enablers can support it—keeping in mind existing system constraints?

**Group E: Widening Equitable Access to STEM Materials, Programs and Resources**

How do we widen equitable access to high-cost STEM materials, programs, and resources? What are the barriers—financial, logistical, and organizational—and what enablers, including funding models and alternative procurement paths, can help overcome them?

**Educator and Family Support****Group F: Embedding Industry-Aligned Skills Throughout K-12 Education**

Based on what industry representatives shared about the skills they're seeking in new hires, how can we intentionally build these competencies throughout K-12 education—starting in the earliest grades? What are the barriers to this consistent skill development, and what enablers can support it?

**Group G : Educator Professional Development & STEM Instructional Capacity**

How do we build educator confidence and capacity to teach and support student STEM learning and persistence? What are the barriers preventing teachers from engaging effectively in STEM instruction, and what enablers—including professional development, access to high-quality resources, externships with professionals, and realistic implementation approaches—can support them?

**Group H: Family Engagement and Support for Student STEM Persistence**

How do we build family and guardian confidence and capacity to support and encourage their student's STEM learning and persistence? What are the barriers preventing families from engaging, and what enablers—including accessible resources, communication strategies, and involvement opportunities—can support them.