

The 7th Annual Family Engagement
LEADERSHIP SUMMIT

welcome!
we will begin
shortly...

**Ohio Statewide
Family Engagement Center**

For Every Child, Every Family, Every School

Teen Science Cafe Network

STEM STARTS WITH THEIR VOICE

Building youth-led, family-powered STEM learning through the Teen Science Café Network.

Agenda



Intro & Icebreaker

Our Mission & The Co-Creation Framework

Bringing It to Life: Events, Careers & Facilitation in Practice

Measuring Growth & Your 30-Day Action Plan

Meet Your Presenters

Welcome and Intros

How do teens currently lead in your program?



Program Director

Sheila James



Program Associate

Katie Dion

Objectives

Explain how the Teen Science Café model shifts youth and families from attendance to shared leadership.

Apply the three-role framework (Youth Lead, Adults Enable, Families Strengthen) to redesign a real event.

Practice reframing common resistance — time, attendance, "unrealistic" choices — into facilitator moves.

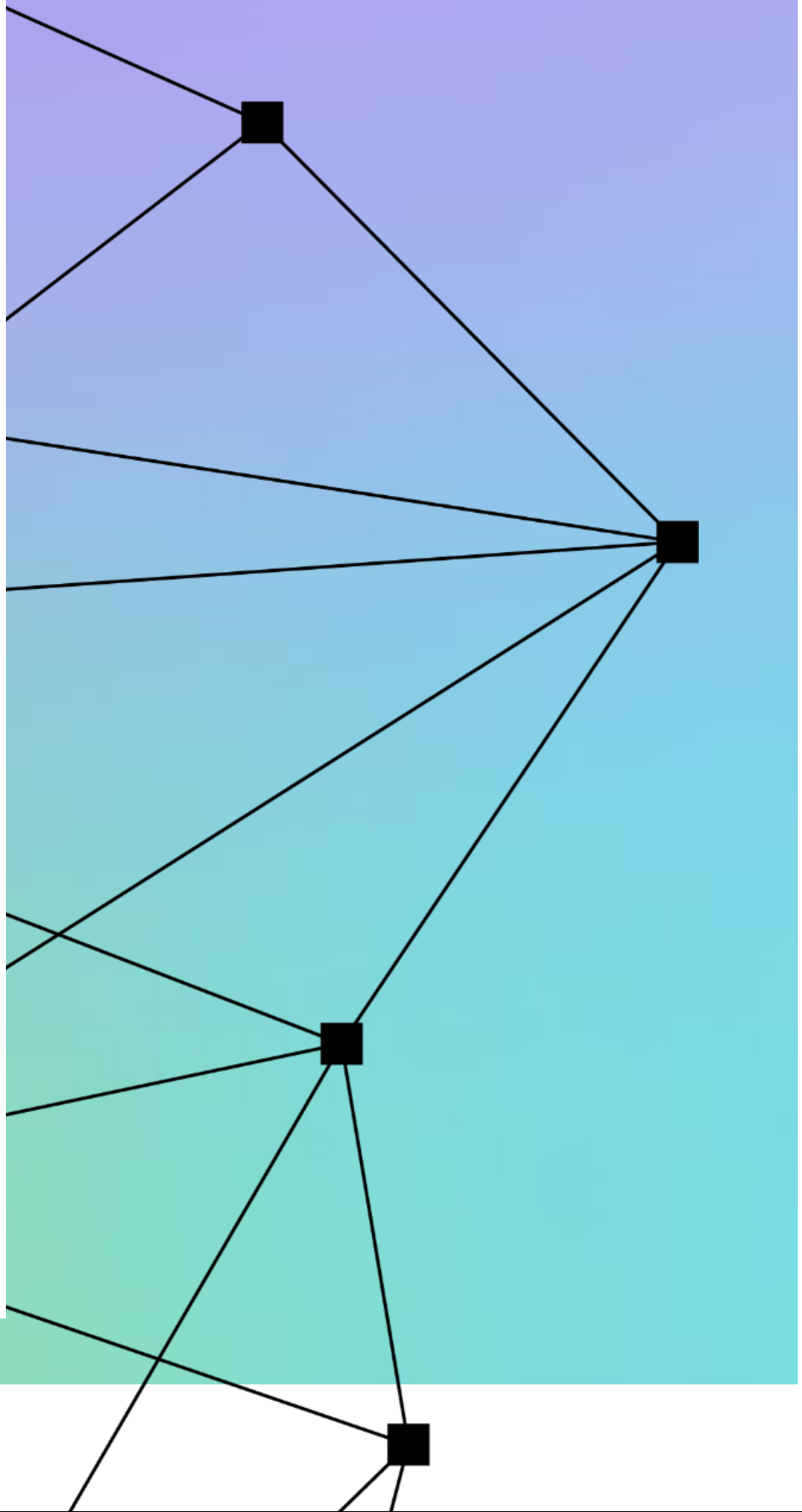
Commit to one concrete 30-day action to shift leadership toward youth and families.

WHY IT'S DIFFERENT

Redesigning the Experience

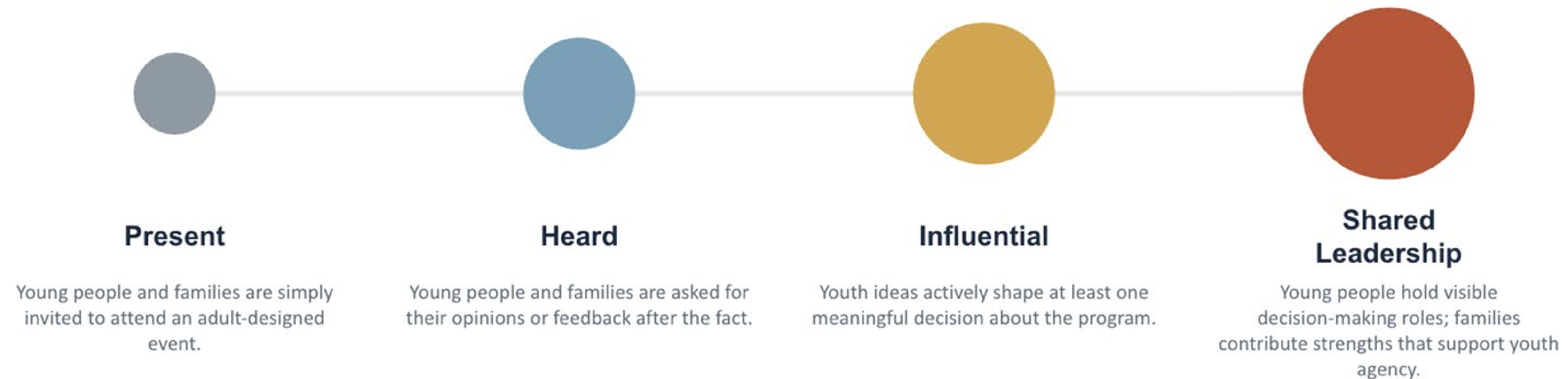
The same topic, delivered two very different ways.

	Traditional STEM Event	Teen Science Café
Who decides the topic?	Adults select topics and hire speakers.	Youth choose topics based on their genuine curiosity.
Format	Long lecture; audience listens passively.	Conversation and interactive, hands-on exploration.
Role of the STEM expert	Teacher delivering facts.	Collaborator sharing authentic career stories and experiences.
Role of families	Passive audience members or homework helpers.	Ecosystem strengtheners bringing culture, careers, networks, and resources.



THE CORE IDEA

Shifting Power: From Attendance to Influence

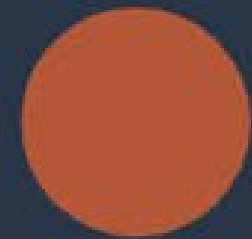


The Power Continuum: the goal of every Café event is to move families and youth from simply present toward shared leadership.

THE FRAMEWORK

The Co-Creation Ecosystem

Three roles, working together, keep youth voice at the center of every Café.



Youth Lead

The steering wheel & driver

Youth lead the learning experience — choosing topics, shaping the agenda, and driving decisions.



Adults Enable

The guardrails & road builders

Adults create the conditions for shared leadership: scaffolds, safety, resources, and time.



Families Strengthen

The navigation & fuel

Families strengthen the ecosystem around youth with culture, networks, encouragement, and advocacy.



ROLE 1 OF 3 — YOUTH LEAD

Shift Voice Into Meaningful Leadership

Choose the Topic

Ask questions directly to STEM professionals and choose the topic based on genuine curiosity.

Create the Materials

Create the marketing materials and document the learning along the way.

Plan the Event

Plan the logistics and event flow from start to finish.

Host the Session

Host and facilitate the actual session in front of peers and families.

Evaluate Success

Evaluate how it went and help dictate the next steps for the program.

Keep Iterating

Carry lessons forward so the next event is even more youth-driven.



Protect youth leadership: student voice becomes leadership only when young people have meaningful choices, visible responsibilities, support, and real influence over decisions.

The Gravitational Center: Teen Leaders

1

Choosing Topics

Brainstorming what the community actually cares about — AI, climate change, search-and-rescue dogs, and more.

2

Designing Activities

Figuring out what the group can build, test, or do to experience the topic firsthand.

3

Hosting the Show

Welcoming guests, keeping energy high, introducing speakers, and running the agenda.

4

Mentoring

Passing on skills to the next crew of leaders to keep the program growing year after year.

Scientists often say: talking with teens helps them become better communicators and reminds them why their work matters — the relationship benefits everyone in the room.

ROLE 2 OF 3 — ADULTS ENABLE

Creating the Conditions for Shared Leadership

1

Scaffolds

Structured menus of choices for younger or newer learners.

2

Access Supports

Removing barriers — food, transportation, language.

3

Relationships

Cultivating trust between youth, families, and experts.

4

Boundaries & Safety

Transparent communication about real constraints.

5

Time & Resources

Dedicated space for youth to plan and execute.

The Adult Guide's role: the ultimate hype person, coach, and behind-the-scenes wizard.

Adults handle logistics, safety, and budgets — and guide teens when they're stuck, while still allowing aspects of an event to “fail” as a real learning opportunity.

Common tension — “We don't have time to let youth plan everything”: scale responsibility gradually. Transfer one meaningful decision first, provide a menu of constraints, and build over time.

ROLE 3 OF 3 — FAMILIES STRENGTHEN

Expanding the Definition of Family Engagement

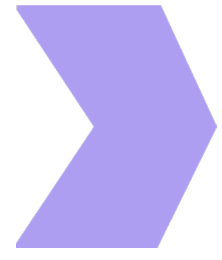


Not this: ~~Families as merely an audience or homework enforcer.~~

Families as Ecosystem Connectors

Families provide real-world learning locations, mock interviews, network connections, and cultural knowledge — and help remove barriers like transportation and food needs.

Core Principle: families are invited into roles that amplify young people's choices and voice — without replacing youth decisions.



BRINGING IN EXPERTS

The STEM Expert: Conversation, Not Lecture

Experts are vetted and guided by Teen Leaders before the event to ensure they collaborate, not lecture.

Old Way — One-Directional

Expert lectures → Students listen

Information flows one way, from a single expert down to a passive audience.

New Way — Every Direction

Teen Leaders ↔ Expert ↔ Teen Guests

Teen Leaders and Teen Guests exchange directly with the expert and with each other.

The Expert's Role:

- Share authentic stories of their personal STEM journey.
- Lead hands-on, interactive activities alongside the teens.
- Answer deep, higher-order questions in an informal setting.

Why it works both ways: the conversation format benefits everyone in the room, not just the teens — it's a genuine exchange, not a performance.



Start With Curiosity

1

Youth Curiosity

What are young people already wondering, noticing, making, or trying to change? Start with genuine youth interest, not an adult-selected topic.

2

Meaningful Decisions

Name at least one decision youth will make and one visible leadership role they will hold.

3

STEM Connection

Who or what could connect the question to authentic STEM practices, careers, or community expertise?

This is Part 1 of the 6-step design process. Steps 4–6 continue on the next slide.



Design for Belonging and Iteration

4

Family Strengths Invitation

How will you invite — not assign — families to contribute strengths in ways youth want?

5

Belonging and Access

What barrier will you remove? Consider language, timing, cost, transportation, technology, food, disability access, confidence, and trust.

6

Reflection and Next Decision

How will youth and families reflect, and how will their learning directly influence what happens next?

This completes the 6-step design process introduced on the previous slide.

WHAT IT LOOKS LIKE

The Anatomy of a Café Event

A typical Teen Science Café runs about 60–90 minutes, start to finish.



The Career-Connected Learning Journey

1

Elementary — Career Awareness

Introducing the concept of work and the value of lifelong learning. Building durable and social skills based on interests.

2

Middle School — Career Exploration

Inspiring youth to think beyond what they know. Identifying required education and training for various pathways.

3

High School — Career Preparedness

Honing in on career choices. Testing real-world fit through hands-on experiences and work-based learning.

Why this matters: Teen Science Café events give youth low-stakes, repeated exposure to real professionals across all three stages — turning one-time curiosity into a lasting career pathway.

Building the Foundation for the Future

1

Durable Skills

The 21st-century “soft skills” that transfer everywhere — critical thinking, collaboration, creativity, communication, fortitude, and leadership.

2

Growth Mindset

The belief that talents and abilities can be developed through dedication, hard work, and perseverance — embracing challenges and learning from setbacks.

3

Work-Based Learning

Bridging classroom knowledge with the demands of future jobs through hands-on interactions, mentoring, and youth-led enterprises.



Reframing Common Tensions in Co-Design

THE TENSION

“We do not have time to let youth plan everything.”



“Families do not attend.”



“What if youth choose something unrealistic?”



“Will family involvement take over?”



THE FACILITATOR MOVE

Transfer one meaningful decision first, provide a menu of constraints, and build over time.

Replace deficit conclusions with inquiry. Ask about barriers and redefine participation beyond attendance.

Be transparent about budget, safety, and time. Invite youth to revise within real constraints.

Name youth leadership as a design guardrail. Ask youth how they want families involved.

SELF-CHECK



Protecting Authentic Youth Leadership

Before you call an event youth-led, ask your team these five questions.



Is the youth role meaningful, visible, and supported — or mostly symbolic?



Did adults clearly name real constraints without reclaiming every decision?



Are families contributing assets rather than being judged by mere attendance?



Did we directly ask young people how they want their families involved?



Will this experience help more young people see STEM as relevant, welcoming, and possible for them?

GROWING OVER TIME

Measuring Your Program's Growth

A self-reflection tool to celebrate progress and acknowledge challenges — every site has both.



What “Above and Beyond” Really Looks Like

Teen Leadership in Planning

From
Adults do nearly all preparation.

To
Teen Leaders self-govern and self-assign tasks without constant reminders, expressing creative control.

Vetting Speakers

From

Accepting any STEM professional and compensating for their lecture style.

To

Iterative, collaborative preparation where scientists receive meaningful feedback from teen leaders that shapes their presentation.

Welcoming Environment

From

An “insider group” where new teens struggle to connect.

To

Established structures, behavioral norms, and topics purposefully designed to help everyone feel they belong.

Why We Shift the Power

Shifting power to teens is not just an engagement tactic — it is the fundamental mechanism for building 21st-century skills.

1 **When youth lead** → they develop durable skills: public speaking, problem-solving, and project management.

2 **When adults allow safe failure** → youth develop a growth mindset: resilience and learning from setbacks.

3 **When families & community strengthen the ecosystem** → youth gain access to real-world work-based learning and social capital.

YOUR NEXT STEP

Your 30-Day Action Plan

Do not wait for perfect conditions to start sharing leadership. Scale responsibility, not respect.

Start with curiosity.

Share the decisions.

Build around the strengths already present.

Join the network at teensciencecafe.org

Within 30 days, I will...

The first young person or family member I will listen to is...

I will know leadership shifted when I see or hear...

contact us

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