

Designing and Sustaining Industry Partnerships



Slides and Resources:

<https://tinyurl.com/WBLpartners>

Tony Perry

04/03/2025

ACTE WBL National Conference

By the end of this session...

- Explain the value of **mutually beneficial** school industry partnerships for WBL
- Evaluate evidence of strategies to create and sustain local partnerships with industry partners
- **Develop an action plan** to create or strengthen partnerships in your community



About me



Assistant Professor, STEM Education, University of North Dakota

15+ years experience developing and supporting innovative technology education learning experience

Research Interests: CTE, improving systems and student pathways into emerging technology



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Join at: **vevox.app**

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Question slide

My primary role in WBL is...

School or district WBL coordinator

##.##%

Classroom teacher

##.##%

Building or district leader (e.g., principal)

##.##%

Industry professional

##.##%

Other

##.##%





##/##

Join at: **vevox.app**ID: **XXX-XXX-XXX**

Results slide

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Other

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RESULTS SLIDE

Mutually Beneficial Partnerships on the WBL Continuum

Career
Exploration

CTE
Concentration

WBL



The student pathway is clear, but
where do we begin to build
school-industry partnerships?

Mutually Beneficial School-Industry Partnerships allow...

Partnerships over Placements

- Center student experiences, not institutional goals
- Leverage complementary assessments of school-based and industry personnel

- Scale and sustainability
- Emergence of new and innovative practices across the WBL continuum
- Equitable access

Example: NIHF STEM School, Akron, OH

Career Exploration

CTE Concentration

WBL



Partner-driven
PrBL

Three career
academies

Student-driven
PrBL w/industry
mentors

Common design
framework across
curriculum, start
in MS

Student project
showcase
nights

“Flex Friday”

Engineer on
“loan”

PL for educators
w/industry
partner





##/##

of the reasons you could

Question slide

do something like this in your school
or community (submit multiple
responses)





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RESULTS SLIDE



Barriers to partnership

- Most partnerships are **one-sided** (Strobel & Sun, 2020)
- Barriers to partnership (Rios et al., 2014)
 - Structural
 - Cultural
 - Procedural
 - Motivational
- Educators are trained as instructional leaders, not cross-sector organizers (Epstein, 2018)

Existence Proofs

	Mid-America STEM	Northeast Rural	Innovative STEM
Student Experience	PrBL	2 days/week offsite WBL	“Flipped” Internship
Locale	Urban	Rural	Suburban
Region	Midwest	Northeast	New England
Type	Career Academy	“alternative” school	School- within-a- school
Size	~300	~60	~120
Population	2/3 male, otherwise matches district	~1/2 from Tribal Lands	More URM than student population



Common Design Elements

- Explicit trust-building
- Signals of institutional credibility
- (Striving for) robust systems
- Aligning instructional subsystems with industry practices



Explicit trust- building

“[students] light up when another person totally outside of the education system, **or at least outside of the education system they know**, has an adult conversation with them.”

“I think [STEM professionals] get inspired by my students. They always come away being excited with how mature and professional and creative the kids are. **they're not like what they expected**”

-Mid-America STEM Classroom Teacher

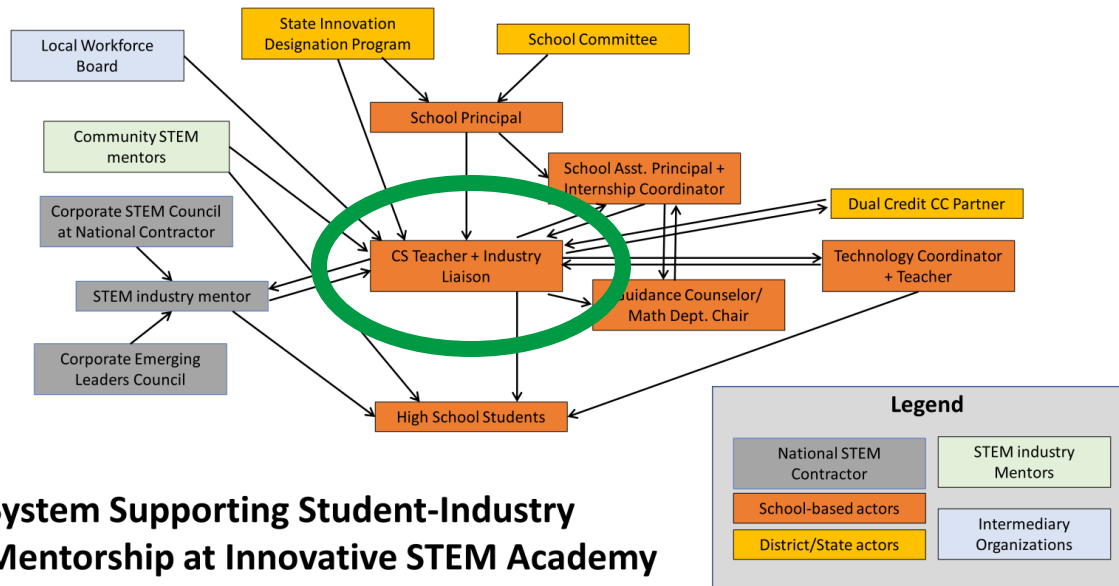


Signals of Institutional Credibility

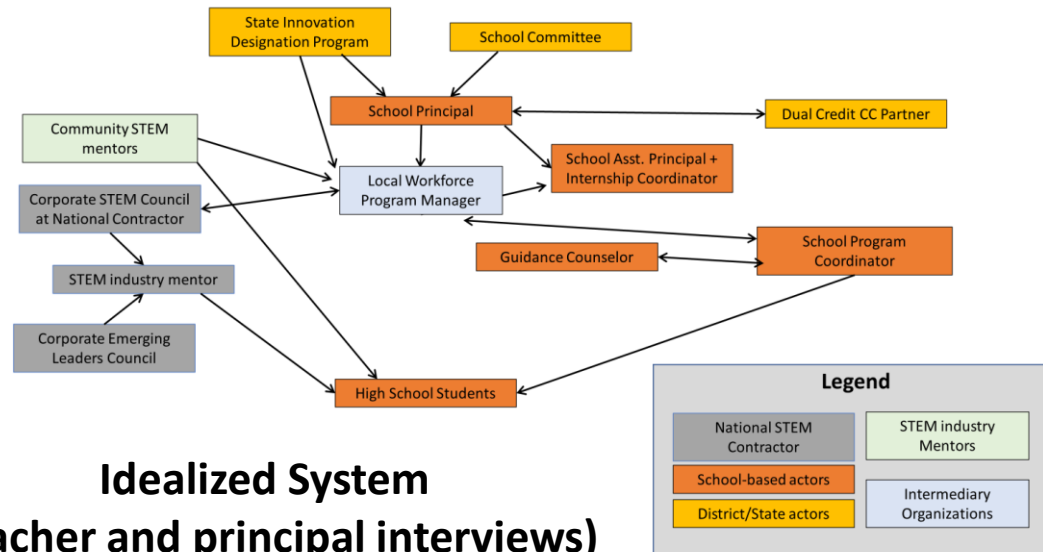
“...I call it our **torches and pitchforks phase** when like people are coming out and questioning our integrity and I'll start sorts of things. And I needed people that had been through it to say, No, this is this is the process stick.”

- Northeast Academy School Leader

(Striving for) Robust Systems



System Supporting Student-Industry Mentorship at Innovative STEM Academy



**Idealized System
(teacher and principal interviews)**

Aligning Instructional Subsystems with Industry

Mid-America	Northeast	Innovative STEM
Flexible Friday for collaboration	Fund student transportation	“Flipped Model” with lunch-time synchronous
Engineer on loan for one school year	Backward map WBL -> learning outcomes	Curriculum co-development w/industry partner
Hosting teacher PD at industry site	Create student opportunities on-site to fill in gaps	

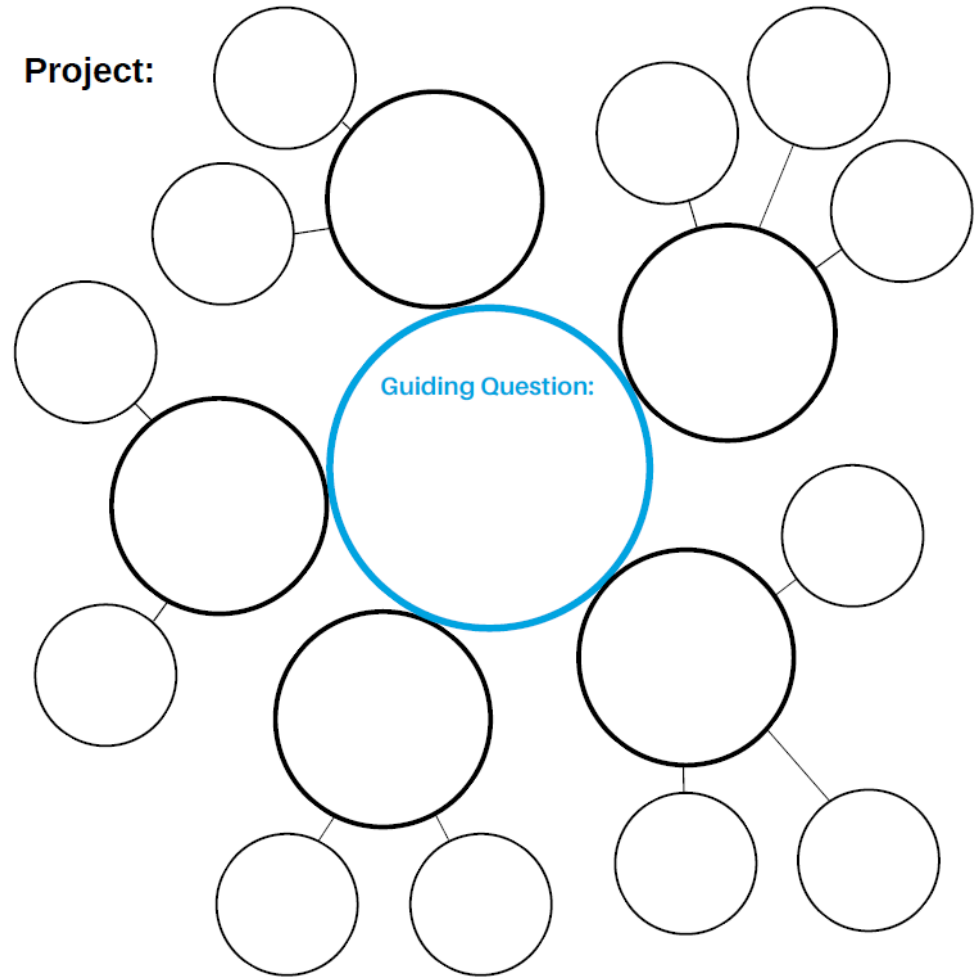
Asset Mapping

Identify an existing program or project where you want to grow existing partners

Big Circles: Themes

Small Circles:
specific
companies/people

Project:



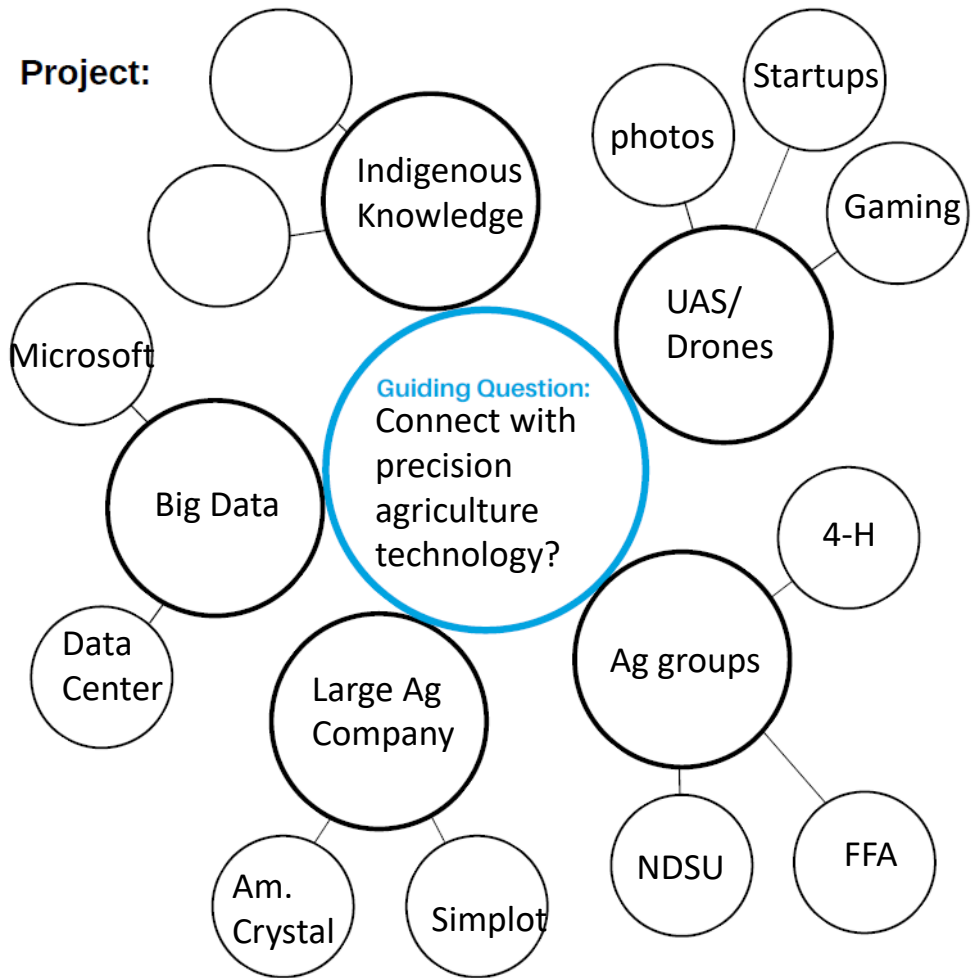
<https://workforce.education.asu.edu/wp-content/uploads/2024/07/Community-educator-asset-map-v1.pdf>

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Next Steps to Growth

Guiding Questions

- 1) How can I put students, potential partners, and teachers in the same space?
- 2) Describe the student experience
- 3) Industry partner assets?
- 4) Teacher assets?
- 5) What is our plan to reconnect?

Discussion

“...I believe in that effort, that interface, the one-on-one contact, that's the difference-maker relationship.”

Manufacturing Plant Manager w/Mid-America STEM

Explicit trust-building

student-school-industry connections

Signals of institutional credibility

Right time for the CEO/Superintendent

(Striving for) robust systems

Focus on complementary assets

Aligning instructional subsystems with industry practices

Start with little changes

Acknowledgements

Dick Larson, MIT IDSS

“Never let reality stand in the way of what is possible.”

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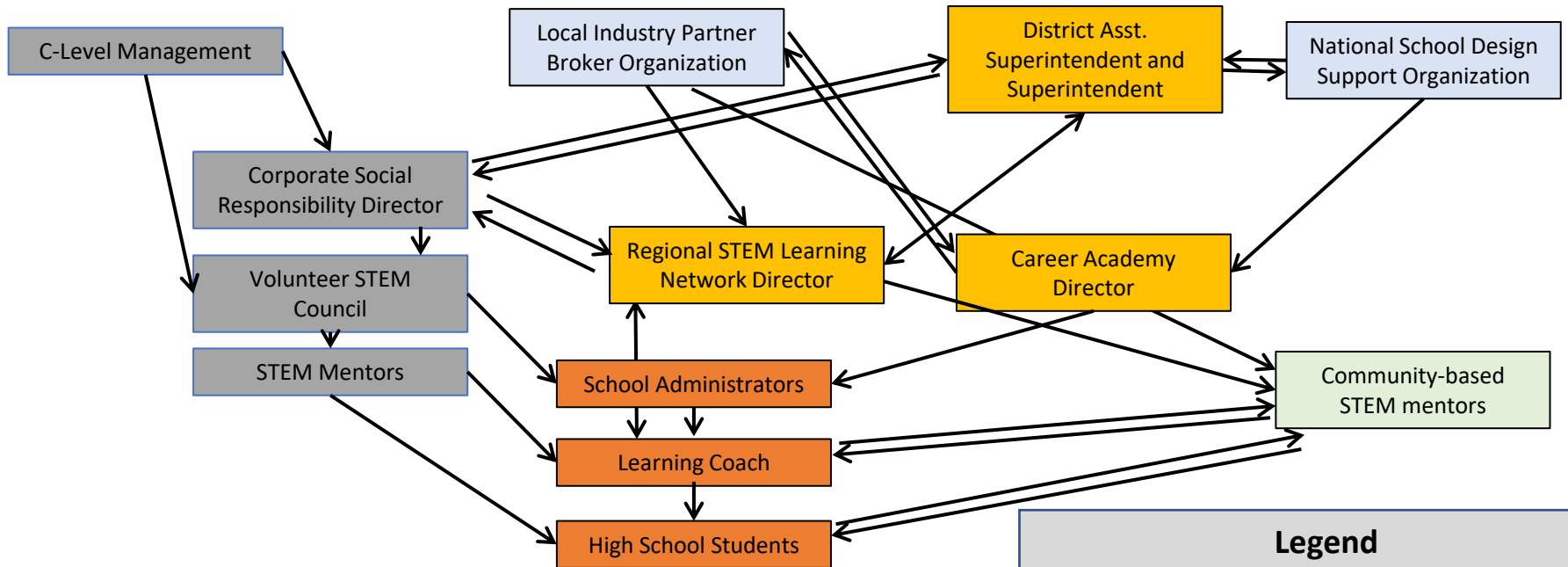


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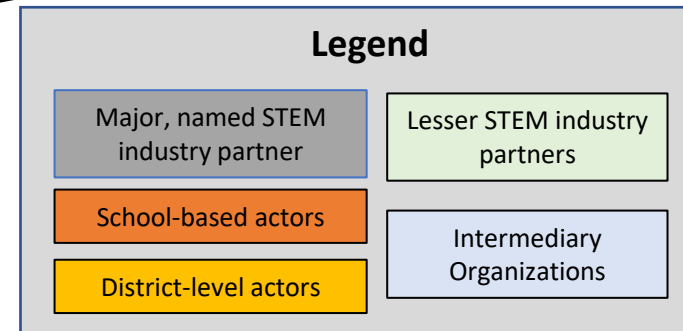
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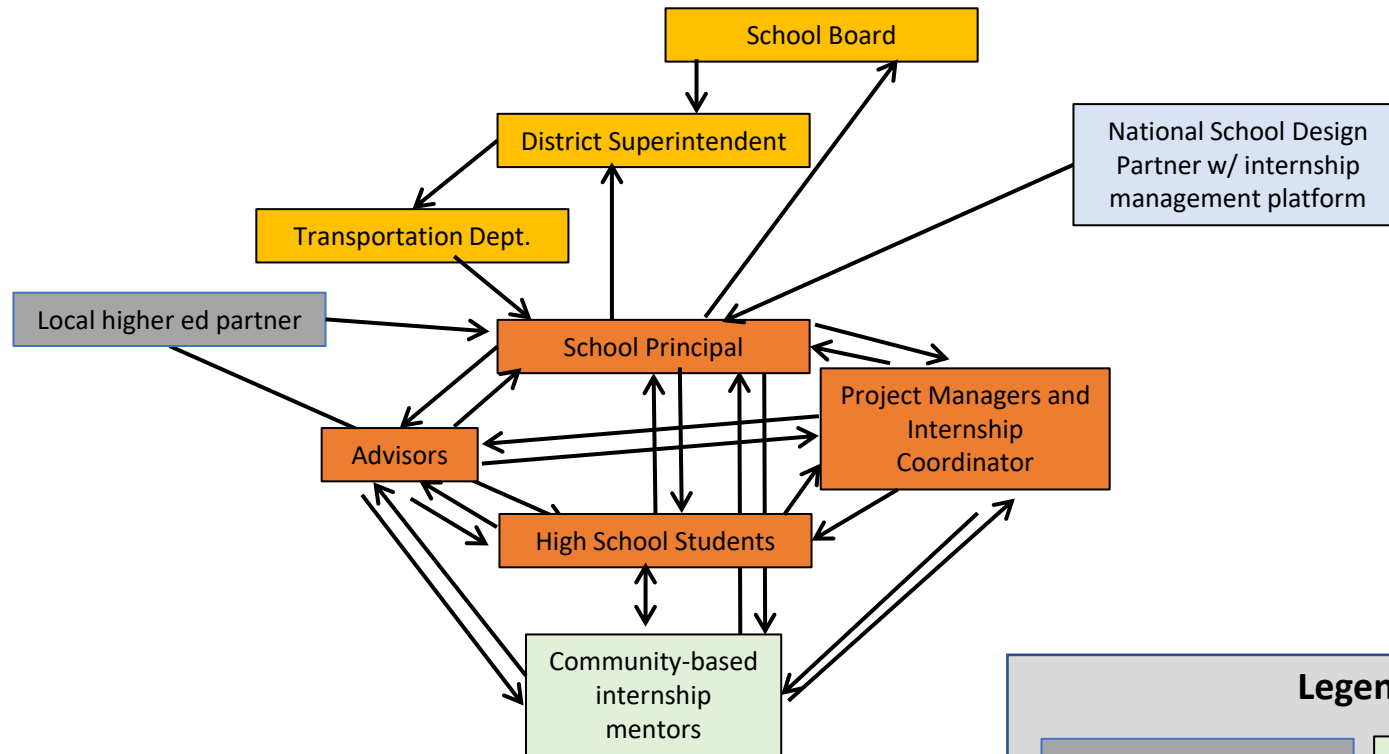
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System Supporting STEM Industry Partnerships with Mid-America STEM HS





System Supporting Student-Industry Partnership at Northeast Rural High School

