

State of Ohio Fiscal Year 2025





SCHOOLS, EDUCATORS, STUDENTS, COUNTIES

# REACHED



1,021
Schools and
Districts



2,722 Educators



349,334

**Students** 



84

**Counties** 



### **Executive Summary and Introduction**



The Ohio STEM Learning Network (OSLN) advances a clear vision: Every Ohio community will have access to quality STEM education to drive Ohio's economic future. As a strategic public-private partnership between the Ohio Department of Education & Workforce and Battelle, the network delivers measurable impact through an integrated approach to STEM education.

### **Demonstrated Impact**

Over the past four years, the number of educators reached annually has more than tripled from 858 to 2,722.

In FY25, OSLN reached 615 public schools alone, fully 20% of schools statewide. A comprehensive and successful awareness campaign created momentum for sustained STEM implementation across Ohio's diverse educational landscape. This expansion reflects both strategic investment and operational excellence.

### **Investment and Leverage**

In FY2025, the state's \$1.5 million investment catalyzed significant additional resources. **Battelle contributed \$7.7 million toward Ohio's STEM future,** demonstrating strong private sector commitment to OSLN. Through Battelle Education, the team secured an additional \$750,000 in external funding for OSLN, further extending the network's capacity and reach.

### **Statewide Infrastructure**

Seven regional hubs provide systematic statewide coverage, growing equitable access across Ohio's diverse communities. In FY2025, these hubs directly supported over 1,400 educators, creating a multiplier effect that reaches thousands of students statewide.

### Schools and districts reached in FY2025



### **The OSLN Strategy**

OSLN works to expand access to STEM through three complementary tracks of work:



Igniting STEM



Strengthening STEM



Showcasing Model STEM Schools

# **Ignite STEM:**

# **Building Statewide Awareness and Early Implementation**

To advance STEM education across Ohio, the Ohio STEM Learning Network focuses on creating entry points for educators and communities across Ohio.

The "Ignite STEM" strategy recognizes that sustainable STEM implementation begins with awareness and grows through experimentation.



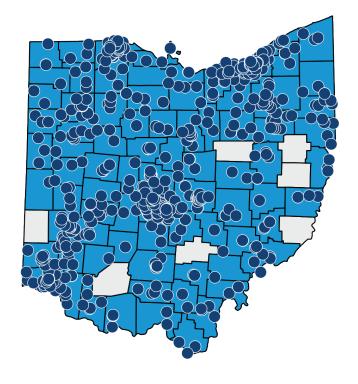
882
Schools and
Districts



**1,600** Educators



229,887 Students Reached











### **Building Awareness (Stage One)**

OSLN provides straightforward ways for Ohio educators to begin in STEM. Easy-to-join, entry-level programs raise awareness and reach a broad audience.

#### **The Ohio STEM Innovation Summit**

The statewide STEM summit brings together 500+ educators annually, featuring 31 learning sessions and networking opportunities that connect educators with one another and key organizations and resources.

- 93% of attendees would recommend the conference to colleagues
- 47% of attendees were from schools who have returned from previous years
- 521 registered attendees including 131 schools, districts, educational service centers, and 30 exhibitors
- "I look forward to this conference every year, and each year it just gets better and more impactful. It's always an honor to be part of such an amazing network of likeminded educators. Thank you for leading the way!!!" 2025 attendee

#### **OSLN STEM Classroom Grants**

Battelle-funded classroom grants empower educators to define their own STEM needs.

- \$1,160,000 reached students in one out of five districts statewide, with 67 counties impacted
- 237 educators in 197 schools reaching 69,000 students

#### Statewide Design Challenge

The design challenge creates authentic connections between classrooms and Ohio's growing STEM industries. In this year's #STEMorbitsOhio challenge, Ohio students worked with experts to solve a real-world space industry problem.

- NASA Glenn Research Center in Cleveland offered the top three student teams a one-day personalized visit to Glenn
- 122 educators in 107 schools reaching 30,813 students

### STE(A)M School Tours

Designated STEM schools open their doors to showcase best practices and inspire other educators through authentic learning experiences and peer-to-peer knowledge sharing.

- 96% of participants agreed that the STEM school visit inspired them to think differently about education practices within their school
- 84% of participants agreed that the STEM school visit deepened their understanding of how learning can be explicitly connected to STEM careers
- 169 educators across 90 schools

### **Early Implementation (Stage Two)**

Once educators are engaged, the network aims to provide structured pathways for deeper engagement.

#### **Teacher Academy with Workforce Fellowship**

A year-long cohort experience that connects educators with local manufacturers through externships, building authentic problem-based learning units.

- 100% of respondents reported increased student engagement in STEM and PBL
- 97% of participants noted greater student understanding of manufacturing and STEM careers and 94% observed increased student interest in manufacturing careers.
- 87% of educators now feel confident in understanding manufacturing career pathway skills compared to just 20% before the program

### **Computer Science Professional Learning Programs**

Multiple cohorts designed to support K-12 educators in everything from getting started in implementing computer science and computational thinking in K-12 classrooms to a specialized licensure exam preparation cohort as a component of Ohio's computer science teaching requirements. These cohorts reached over 100 teachers in 2024-2025 school year.

- 100% of participants in the reported feeling comfortable facilitating Computational Thinking in other content areas (2024-2025 cohort)
- 30 teachers earned a passing score on their Computer Science Licensure Exam

#### **Supplemental Middle School Career Curriculum**

The supplemental middle school career curriculum reached educators with STEM resources through Learning Blade, introducing students to high-demand STEM careers through hands-on missions.

- completion of over 285,000 online lessons statewide
- 25,000+ hours of online STEM learning

#### **Rural STEM Fellows**

Specialized fellowship program built STEM confidence among rural educators, with participants showing significant growth in STEM identity and community connections.

- 15 educators in 13 schools in the Southeast Ohio region
- "I had never engaged a community partner before this Fellowship. I wanted to challenge myself, so that was what I chose to do with my students. I hope to engage more partners in the future!" Kim W.







# **Strengthening STEM:**

# **Deepening Practice and Building Systems**

Building on initial awareness and experimentation, the OSLN's "Strengthening STEM" strategy focuses on sustained learning and systematic implementation. These two stages move educators and schools from individual practice to coordinated STEM approaches.



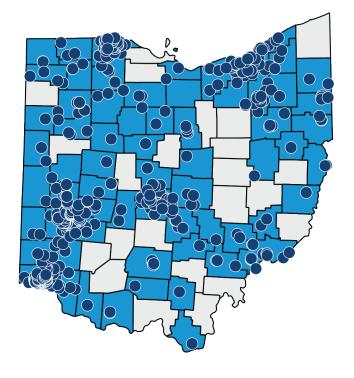
**514**Schools and Districts



1,503
Educators



207,336 Students Reached



# **Learning and Implementing STEM Practices** (Stage Three)

During this learning stage, STEM implementation focuses on building capacity through multiple learning opportunities for teachers and school leaders. Regional hubs play a crucial role, supporting STEM initiatives whether they originate from grassroots teacher efforts or leadership directives. This stage leverages Ignite STEM programs to expand educators' professional development and STEM learning experiences.

### **Regional Hub Systematic Support**

Ohio's seven regional hubs deliver targeted support based on local needs. Below are a few examples of how this might be approached differently from region to region:

**Personalized Learning:** The Akron Hub identified personalized learning as a critical need through its STEM Advisory Committee. The hub contracted with Teach Better Team to deliver a virtual learning to deliver a virtual learning series to 100 educators.

**Industry Partnerships:** The Dayton STEM Hub facilitated connections between schools and regional employers at the Dayton STEM Leader Summit which engaged 70+ industry representatives.

**Deep Dive into STEM:** The Northwest Ohio Hub hosted its first regional STEM Deep Dive session with 50+ registered participants and a waiting list, demonstrating significant demand for localized designation support programming

**Introduction to PBL Workshops:** Dayton and Northeast Ohio Hubs delivered workshops equipping educators with design thinking and problem-solving strategies to implement project-based learning in their classrooms

**Rural Focus:** Southeast Ohio Hub coordinates specialized programming for underserved rural regions

**STEM Advisory Board membership:** Central Ohio supports schools across the dentral Ohio region through engagement with their STEM Advisory boards where they provide insights and resources the school regarding STEM designation, instructional practices, partnership connections and opportunities for further professional development

**Computational Thinking:** Northwest Ohio Hub identified computational thinking gaps and contracted expert professional development for entire region

1,403 educators in 461 schools reaching 183,241 students across all hub activities









# **Building a Systematic Approach to STEM Education** (Stage Four)

Success at the end of this stage is having an intentional plan to implement best practices of STEM within your school.

### **Innovative Leaders Institute: Bridge to STEM**

A year-long professional learning experience for school and district leaders to learn how to transform their school environment with STEM. Participants explore STEM culture, education, and careers while building confidence as STEM leaders through interactions with model schools and experienced practitioners.

- Nearly twice as many participants agree that they feel connected to a community of STEM educators after participating in Bridge to STEM (Pre-survey 50%; post survey 95% agree)
- 100% of participants agree that, because of learning in this program, they have implemented or they have helped teachers implement STEM teaching practices more frequently.
- 15 schools across 6 regional hubs in inaugural cohort
- "I have a completely new understanding of what STEM education is. I've learned that
  it's a way of thinking and learning rather than just a focus on science, engineering, etc."
  2024-25 Bridge to STEM Participant

### **Fostering STEM Institute**

Instructional specialists and teacher leaders build confidence in STEM pedagogy through year-long cohort experiences. Each leader can participate in a one to three day STEM school residency.

- 100% of participants agree that applying the strategies learned over the course of this experience will have a positive impact on my school.
- 100% of participants agree that because of learning in this program, they have implemented/helped teachers implement STEM teaching practices more frequently.
- 39 educators in 24 schools reaching 12,162 students
- "My understanding of STEM has changed completely. It's a mindset not a program or classroom or teacher." 2024-2025 participant

#### **Innovative Leaders Institute: Reimagined**

Building-level leaders transform current practices to bring high-quality STEM education to their students. Participants network as a peer group while applying transformational leadership strategies.

- 79% of Coaches & School Leaders believe that participating in Reimagined has helped them support teachers in implementing STEM teaching practices more frequently.
- 27 educators in 12 schools
- "I am looking forward to bringing back my take-aways from this experience to my school and seeing our STEM practices grow." 2024-2025 participant

# **Model STEM:**

# **Sustaining Excellence and Innovation**

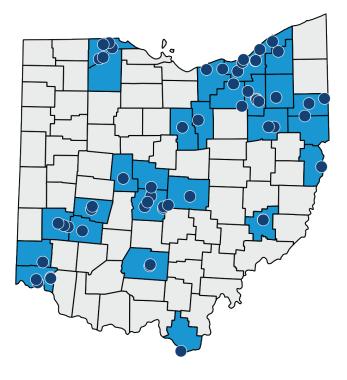
OSLN's "Model STEM" strategy focuses on developing and sustaining exemplary STEM models that may serve as beacons for the state. This work occurs through two advanced stages that create and maintain Ohio's highest-quality STEM educational environments.



56 Schools and Districts



24,142 Students





### **Building and Sustaining STEM Models (Stage Five)**

At this stage, schools receive recognition for their systemic approach to implementing rigorous STEM practices.

### **Initial Designation**

In FY25, OSLN coordinated reviews for seven initial designation applications. One of these schools was recommended for initial designation: Par Excellence STEM Academy. Additionally, three of the schools were very close to meeting the bar for designation and are receiving technical guidance throughout the coming year on their areas of growth.

### **Re-designation**

The 2024-2025 school year marked the third year of redesignation for STEM and STEAM schools. When these schools initially sought designation (before changes enacted in 2021), there was no expectation of redesignation. Of the eight schools initially designated in 2018 who submitted compliance reapplications, six completed their quality monitoring cycle. After the initial assessment, two of these schools immediately received re-designation.

OSLN and the Ohio Department of Education & Workforce are collaborating with the remaining four schools to create growth plans that the schools will implement over the course of the next year.

### **Growth plan schools**

Of schools placed on growth plans in FY2024, seven schools have completed their corrective action plans and been recommended for an additional five years of designation in fiscal year 2025. An additional three will be recommended in the first STEM committee meeting in fiscal year 2026.

Table 1. Ohio's designated STE(A)M schools by region and school type

	Traditional Public District	Independent	Community	Private/ Equivalent	Total
Akron	8	2	0	4	14
Central	5	1	2	1	9
Dayton	2	3	1	0	6
Northeast	4	1	0	5	10
Northwest	6	0	0	0	6
Southeast	4	1	0	1	6
Southwest	4	0	0	1	5
Total	33	8	3	12	56

# Innovating and Giving Back to the STEM Community (Stage Six)

Deeply integrated into the STEM education network, schools now actively contribute and share their transformative experiences. Through mentorship, hosting visitors, conference presentations, and more, these experienced schools become critical catalysts for strengthening the broader STEM education network.

#### **STEM Excellence Awards**

Annual recognition program celebrates leaders advancing STEM innovation. 2025 Excellence awards were recognized at this year's STEM Summit and will be invited to present sessions at the 2026 Summit.

#### Awardees include:

- Rachel Sanders, Excellence in STEM Teaching
- Chavin Lewis, Excellence in STEM Leadership
- Cleveland Museum of Art and Incarnate Word Academy, Excellence in STEM Partnership
- Sam Crews, Outstanding Service Award

### **Model School Leadership Activities**

Designated schools serve the broader STEM community through:

- Site Visit Hosting: Schools open doors for peer learning and best practice sharing
- Designation Review Service: School leaders serve as expert reviewers for aspiring schools
- Conference Presentations: Model schools share innovations at state and national venues
- STEM Mentorship and Residence Programs: Experienced schools' mentor emerging STEM educators in OSLN's Innovative Leaders Institute and provide one to three day residence opportunities to participants in the Fostering STEM Institute to immerse themselves in a STEM School environment.

This model approach creates a sustainable cycle where Ohio's most successful STEM schools become the foundation for expanding excellence statewide, ensuring continuous innovation and peer-to-peer learning that strengthens the entire network.





## **Additional Funding Leveraged**

As the backbone organization of the Ohio STEM Learning Network (OSLN), Battelle expands the impact of the state's STEM education funding. The company does this in two ways.

First, Battelle expands STEM education in Ohio through philanthropic giving. This includes funding the seven regional STEM hubs of OSLN and the OSLN STEM Classroom Grant Program. Battelle also gives to organizations beyond the network focusing on developing STEM opportunities for students outside of the school day.

Second, Battelle expands the impact of the state's funding by having OSLN compete for and win private and federal funding.

**Table 2. Directly supporting OSLN** 

Funding Organization	Description of Funding	Amount
Battelle	Battelle funded the OSLN STEM Classroom Grant Program for the 2024-25 school year	\$1,160,000
Battelle	Battelle provided FY25 philanthropic funding to each of the Ohio STEM Learning Network's seven regional hubs	\$150,000
Blueforge Alliance (DoD program integrator)	Funding the implementation of the Teacher Academy with Workforce Fellowship from April 2023 through September 2025. Note - this is a multi-state project.	\$370,000
Putnam County ESC	The Putnam County ESC partnered with OSLN to apply for the Teach CS funding to expand Computer Science in Ohio. This funding supported educators in the 2024 and 2025 CS Exam Preparation Program and cohorts running throughout the 2024-2025 school year and those launching in June 2025.	\$115,987
Central Ohio ESC	The Central Ohio County ESC partnered with OSLN to apply for the Teach CS funding to expand Computer Science in Ohio. This funding supported educators in the 2024 and 2025 CS Exam Preparation Program and cohorts running throughout the 2024-2025 school year and those launching in June 2025	\$258,166
Gallia & Vinton County ESC	The Gallia & Vinton County ESC partnered with OSLN to pilot a new entry level CS program which launched in June 2025.	\$34,000

Table 3. Supporting quality STEM education in Ohio

Funding Organization	Grantee	Description of Funding	Amount
Battelle	YMCA of Central Ohio	Two-year support of embedding and increasing STEM themes throughout key student programming.	\$1,100,000
Battelle	Central Ohio STEM Grants	Funded the Battelle STEM Innovation Grant program to support K-12 informal STEM learning in the Central Ohio Community	\$1,215,500
Battelle	Franklin County Historical Society (COSI)	Supported the COSI Science Festival and diverse and accessible STEM education programs	\$500,000
Battelle	The Nature Conservancy	Support the Global Externship Program for Youth primarily focused on Central Ohio students. Youth will experience and prepare for careers in conservation and exploration through an 8-week cohort-model design challenge.	\$300,000
Battelle	Battelle Education	Management of the Stay in the Game! Network dedicated to reducing chronic absenteeism, promoting regular student attendance and improving academic outcomes and graduation rates.	\$500,000
Battelle	Ohio Academy of Science	Supported 2025 State Science Day and the International Science and Engineering Fair (ISEF).	\$40,000
Battelle	Columbus Metropolitan Library Foundation	Supported the Columbus Book Festival.	\$50,000
Battelle	Metro Early College High School	General operating support.	\$100,000
Battelle	Columbus Council on World Affairs	Support of the Global Scholars Diploma Program.	\$25,000
Battelle	New Albany Community Foundation	The New Albany Lecture Series which includes the Student Lecture Series.	\$75,000
Battelle	The PAST Foundation	Support the expansion of the PAST Portable Innovation Labs Project.	\$2,500,000

### **Looking Ahead**

Scaling STEM through the network approach

**Ignite STEM** 



**Strengthen STEM** 



### **Model STEM**



As the state continues the mission to build model schools that truly represent Ohio's diverse educational landscape, the data reveals both promising progress and meaningful opportunities for growth. Currently, only 5% of Ohio's designated STEM schools are located in rural districts, despite rural communities comprising 20% of the state's total school districts (table 4 below). This disparity underscores the critical need for expanded STEM education access in these communities.

Yet, we are encouraged by the emerging signs of positive change. The network has made significant strides in engaging rural school populations, with 19% of schools participating in OSLN's Ignite STEM programs and 11% of schools involved in our Strengthening STEM programming coming from rural districts. These numbers represent more than statistics, they reflect a commitment to breaking down barriers and creating equitable STEM learning opportunities across Ohio's educational system.

The journey continues, driven by the belief that every student, regardless of their geographic location, deserves access to world-class STEM education. The progress made is not an endpoint, but a promising foundation for continued expansion and innovation.

Table 4. OSLN programming by school district typology in FY2025

District Type	Share of schools/districts in OSLN Ignite STEM programs (%)	Share of schools/districts in OSLN Strengthen STEM programs (%)	Share of designated STEM Schools (%	Share of schools/districts statewide (%)
Rural	19%	11%	5%	20%
Small Town	25%	18%	13%	24%
Suburban	26%	32%	39%	27%
Urban	30%	39%	43%	29%
Unique IRNs	882	514	56	5,134

