



smartlab®

Learning is different here.

SmartLab is a career-connected STEM ecosystem that equips today's students for tomorrow's challenges.





We've got
“ah-HA!”
moments down
to a science!



STEM identity isn't about having access to one tool or one class— it's about believing you belong, that you can master rigorous challenges, and that your ideas add value. Every student deserves that belief. When we intentionally create environments that give students repeated opportunities to struggle productively, solve problems, and see the real-world impact of their ideas, we're not just teaching STEM — we're preparing confident, future-ready learners."

—Dr. Jennifer Berry, CEO | SmartLab



STEM identity today. Any career tomorrow.

In an AI-driven world, STEM identity and readiness matter in every career.

SmartLab is an integrated STEM learning ecosystem where engagement is the engine of growth. Students build confidence and purpose as they solve meaningful problems and connect classroom learning to the careers of tomorrow.

SmartLab students believe: *I belong here. I can do this. I add value. I'm future-ready.* This mindset takes shape through active, student-centered learning cycles—each ah-HA! moment steadily converting raw curiosity into resilient, purposeful problem solving.

What makes SmartLab different?

- Builds STEM identity through authentic, hands-on learning
- Connects classroom experiences to real-world careers
- Engages learners with integrated STEM applications



See what
students and
educators say





Students build durable skills that matter in today's economy.



SmartLab helps students build the kinds of durable skills that serve them long after a project ends.

Communication, critical thinking, and adaptability are integrated into every experience as essential outcomes. These durable skills prepare students for any job, career, or calling while strengthening their STEM identity and confidence in their ability to tackle complex challenges.

AI Literacy

Collaboration

Communication

Computational Thinking

Data Literacy

Design Process

Digital Citizenship

Ethics

Lifelong Learning

Mathematical Concepts

Natural Systems

Persistence

Research Design

Systems Thinking

Knowledge Construction



The communication I've had with industry leaders in Michigan about the program itself comes primarily from their visits to our schools... I tell them, 'Get prepared, because you're going to have 18-year-old kids with more knowledge than some of your employees.' That's an exciting proposition for them because a lot of jobs are unfilled."

—Mark Whelton, Superintendent, Bridgeport-Spaulling Schools | Bridgeport, MI



What's SmartLab?

SmartLab is an integrated ecosystem that sparks ah-HA! moments and builds STEM identity.

**Career-Connected
PBL Curriculum**

**Hands-on
Tools &
Equipment**

**Ongoing
Support &
Partnership**



**Customized
STEM Learning
Environments**

**SmartLab
Certified
Facilitator**



Career skills take shape through authentic, real-world learning.

Where Career Skills Emerge in Authentic Context

SmartLab curriculum guides students through experiences that build both academic mastery and workforce-ready capabilities. By tackling authentic challenges, students develop and demonstrate the exact skills employers seek.

Spark (K-12)

Spark Curiosity, Ignite Learning

Spark introduces students to a broad range of technologies, fostering digital literacy and adaptability. Self-directed exploration builds curiosity and problem-solving skills applicable across careers.

PROGRAM HIGHLIGHTS

- **Self-Directed Exploration:** Encourages students to choose topics of interest and explore at their own pace, building critical thinking skills.
- **Technology Integration:** Introduces a wide variety of STEM tools to promote digital literacy and engagement.
- **Flexible Projects:** Provides adaptable learning experiences (2-4 hrs) that fit diverse classroom environments and schedules.

Explorer (K-5)

Explore Your World, Uncover Possibilities

Explorer introduces students to key industries and careers through hands-on STEM challenges. It provides exposure to a variety of real-world applications, helping students see how STEM is relevant to their futures.

PROGRAM HIGHLIGHTS

- **Guided Exploration:** Provides structured units that connect STEM concepts to practical applications.
- **Industry Exposure:** Offers insights into various career pathways through real-world problem-solving tasks.
- **Adaptable Challenges:** Engages students in relevant, hands-on projects that fit different learning environments

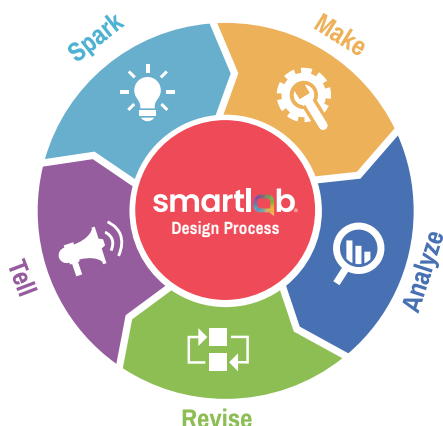
Pathfinder (6-8)

Find Your Path, Shape Your Future

Pathfinder deepens students' experience with industry-specific challenges, helping them develop the advanced STEM skills and problem-solving abilities needed for future careers in high-demand fields.

PROGRAM HIGHLIGHTS

- **Guided Challenges:** Engages students in structured, real-world projects connected to industry challenges.
- **Integrated STEM Concepts:** Develops critical skills using STEM tools and technologies applicable across industries.
- **Real-World Problem Solving:** Encourages students to apply their learning to practical scenarios, connecting STEM concepts to future careers.





Spark (K-12) Unit Spotlight

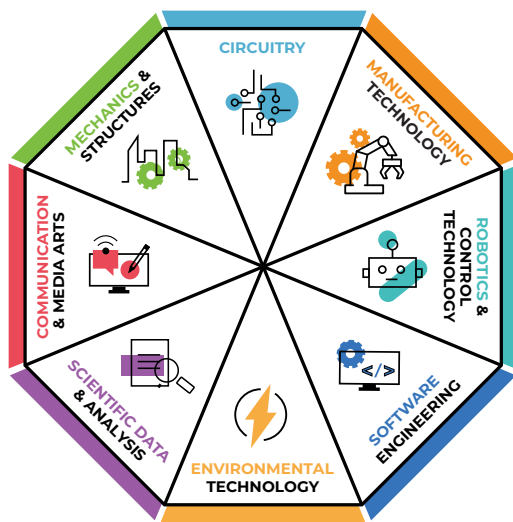
Home Energy Audit (for grades 9-12)



Area of Exploration:
Environmental Technology

Challenge: Use all the tools in the Energy Efficiency Kit to conduct an energy audit of a home or school.

Overview: After collecting data during the audit, students will analyze their findings and develop recommendations to help their families or school reduce energy usage and save money.



Areas of Exploration (Spark K-12)



We are so lucky to have found and partnered with SmartLab. Their quality curriculum, innovative approach, and forward thinking have helped us provide students throughout North Dakota the opportunity to explore hands-on, project-based STEM learning. SmartLab has narrowed the digital divide and exposed learners to technology and potential careers they may not have had access to otherwise."

—Dr. Tonya Greywind, Assistant Superintendent, North Dakota Center for Distance Education | Fargo, ND



Explorer (K-5) Unit Spotlight

Harvest Hauler (for grade K)



Career & Industry Pathway:
Agriculture, Energy, & Natural Resources



Integrated STEM Application:
Robotics & Control Technology

Challenge: How can we program a self-driving delivery truck to help a farmer bring food to our community?

Overview: Learners explore how food goes from farm to table, considering food distribution challenges and focusing on delivering fresh produce to food deserts.

Just 30% of 2024 graduates met at least three of ACT's four readiness benchmarks¹ — while 75% of employers report difficulty filling positions².

¹ACT (2024) — "Thirty percent of 2024 high school graduates met three or four of ACT's College Readiness Benchmarks." <https://www.act.org/content/act/en/research/services-and-resources/data-and-visualization/grad-class-database-2024.html>

²ManpowerGroup (2024) — "74% of employers report difficulty filling roles" (global) <https://go.manpowergroup.com/talent-shortage-2024>



Research that Strengthens Learning Outcomes

SmartLab contracted with the **Johns Hopkins University School of Education Center for Research and Reform in Education** to study the impact of its Explorer and Pathfinder programs on student outcomes. The multi-district study examines science and mathematics achievement and STEM identity using independent measures. **Conducted across schools in Texas, Illinois, and California**, it compares SmartLab participants with similar non-SmartLab schools and meets ESSA Tier 3 evidence standards. Grounded in research, SmartLab builds lasting skills, confidence, and belief in student potential.



JOHNS HOPKINS
SCHOOL of EDUCATION



Pathfinder (6-8) Unit Spotlight

Community Connections (for grades 6-8)



Career & Industry Pathway:
Construction and Architecture



Integrated STEM Application:
Modeling and Design

Course: Engineering Design

Challenge: How can we create a development that brings our community's dreams to life while addressing all its needs? Let the city-building adventure begin!

Overview: In this action-packed unit, you'll become a visionary urban planner and a creative architect tasked with designing an epic new development for your community!



AUTODESK
AutoCAD



We are a school that is focused on providing our girls with STEM opportunities. We were looking for a curriculum that would allow us to fully utilize the space for all of our girls which meant we needed access to a scaffolded curriculum K-12. Additionally, we wanted a program that was focused on 21st century skills that would align with our mission for educating our young women. SmartLab provides a great deal of flexibility so that students can find projects that align to their personal interest and we hope this lab will help support our desire for teachers to do more project-based learning."

—Dr. Tracy Bonday, Head of School, Ursuline Academy | New Orleans, LA



We are able to work with our students to get them career and college ready, and we do that K-12. SmartLabs help by getting students' hands on projects and activities, getting them working with partners in the classroom, and getting them building something they would've never imagined they could build...it's actually shown our community what our students are capable of."

—Dr. Deirdre Pilch, 2025 CO Superintendent of the Year, Greeley-Evans School District 6 | Greeley, CO



Industry-aligned tools prepare students for a changing workforce.

Every unit builds STEM skills and identity through authentic application.

Unit challenges connect STEM tools with industry-relevant problems, helping students cement academic learning while developing critical thinking, collaboration, and future-ready skills.

- Students advance from introductory tools to professional-grade technology by high school.
- STEM applications enhance problem-solving across industries, from healthcare to the arts.
- Hands-on experiences connect classroom learning to careers in every field.

Off-track freshmen are more than 3.5× likelier not to graduate¹, while active STEM learning narrows failure gaps by 45% and exam gaps by 33%².

Career Connections

Career & Industry Pathways



Agriculture, Natural Resources, & Energy



Advanced Manufacturing



Construction & Architecture



Education



Finance, Business, & Entrepreneurship



Healthcare Sciences



Entertainment, Arts, & Media



Transportation, Distribution, & Logistics

Integrated STEM Applications



Artificial Intelligence



Circuitry & Electronics



Communication & Multimedia



Data Collection & Analysis



Information Technology



Mechanics & Structures



Modeling & Design



Robotics & Control Technology

¹Active learning narrows exam gap by 33% / passing gap by 45% — Theobald, E. J., et al. (2020). "Active learning narrows achievement gaps for underrepresented students in STEM." PNAS. DOI: <https://www.saltise.ca/wp-content/uploads/2020/03/Theobald-et-al.-2020.pdf>

²"On-Track" freshmen are ~3.5 times more likely to graduate than off-track peers — National Academies, "5 Early Warning Indicators" (High School Dropout, Graduation, and Completion Rates) (2011). Chapter: <https://nap.nationalacademies.org/read/13035/chapter/7>



What's Inside a SmartLab



The SmartLab has opened a whole new way of learning and developing career paths for our high school students. We have been able to open them up to new career ideas that many have never considered or even knew existed. In our lab the students have become licensed drone pilots who are working in the field, are coding their own apps to solve equations, have developed websites for outside businesses, and have decided to go to college for engineering in various fields. The kids in our lab are truly making life decisions about their future careers. None of that would have happened before you installed this lab.."

—Marcus Diamond, SmartLab Facilitator, Weld Central HS, Weld County RE5 School District | Keenesburg, CO



Purposeful environments create the conditions for deeper learning.

Environment Impacts Experience

Students work in multi-station environments that cultivate teamwork, communication, and problem-solving—key skills in any workplace. SmartLab's collaborative layout encourages the teamwork, communication, and problem-solving skills essential in any industry.

SmartLab HQ Learning Environment

- Designed for new or existing spaces with a fully integrated STEM environment
- ADA-compliant, purpose-built layout optimized and furnished for collaboration and hands-on learning
- Customizable technology packages to match school goals and student needs

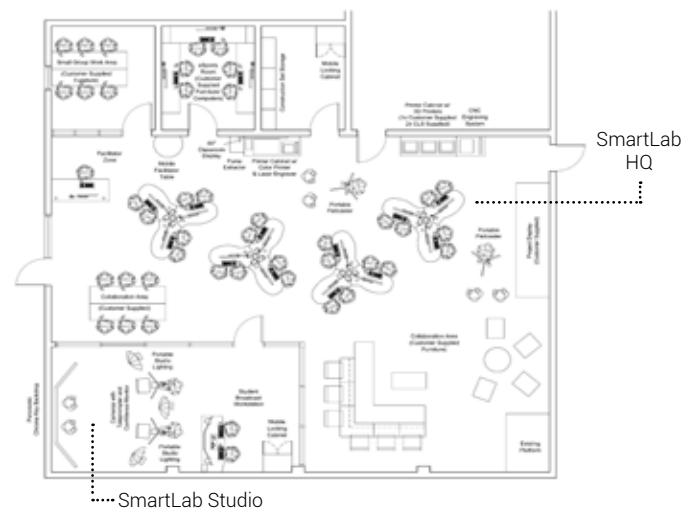
SmartLab FLEX Learning Environment

- Brings engaging STEM experiences to any classroom or other learning environment
- Customizable packages for different schedules, spaces, and budgets
- Transforms existing spaces into interactive, collaboration-driven environments

Traditional lecture-style classrooms produce **50% higher failure rates and lower exam scores¹.**

Purpose-built collaborative spaces foster greater student engagement and participation².

Allendale Fairfax High School | Fairfax, SC



¹Rands & Gansemer-Topf (2017) — The Room Itself Is Active: How Classroom Design Impacts Student Engagement <https://files.eric.ed.gov/fulltext/EJ1152568.pdf>

²Steelcase — How Classroom Design Affects Student Engagement <https://www.steelcase.com/eu-en/research/articles/topics/learning/how-classroom-design-affects-student-engagement/>





The SmartLab facilitation method really accelerated the way that kids were gaining experience. It shifted the way I approached teaching because I could see firsthand the impact of this hands-on, student-driven learning."

—Maxwell Bullen, Facilitator, St. Anthony of Padua Roman Catholic School | Henderson, NV



Investment in educators drives consistent student outcomes.

Professional Learning That Ensures Consistent, High-Quality Implementation

Professional Learning protects the value of STEM investments by addressing longevity, consistency, and return on investment. Delivered through the SmartLab Certified Facilitator program, SmartLab Professional Learning ensures sustained value through guided implementation and support. Certification begins with a five-week Foundations cohort, followed by virtual follow-ups that prepare facilitators to implement SmartLab with confidence. Ongoing access to a national peer network, annual refreshers, and on-demand resources helps maintain instructional quality as programs grow.

Sustained, job-embedded, collaborative professional development¹ drives significantly larger gains in teacher practice and student outcomes than one-off workshops².

¹Learning Policy Institute — https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf

²Education Policy Institute — <https://epi.org.uk/publications-and-research/effects-high-quality-professional-development/>



Foundations Training

A structured 5-week cohort that anchors the SCF model and prepares facilitators for confident implementation.



Extend Learning

Advanced, school-tailored strategies to deepen facilitator practice now.



Collaboration & Implementation

Job-embedded support integrates PD into daily practice.



Professional Community

National cohort for peer practice, problem-solving, and support.

The Principles

Professional Learning converts preparation into consistent, high-quality classroom practice, resulting in stronger student work, shared facilitation routines, and faster educator readiness. These principles ensure reliable implementation without increasing oversight burden or reliance on individual champions.

- **Active Engagement** — Models facilitation practices that sustain inquiry and support consistent instructional quality.
- **Authentic Application** — Anchors learning in real-world problems so student work demonstrates relevance and transfer.
- **Collaborative Growth** — Builds shared norms and peer routines that support continuity and shared ownership.
- **Evidence-Driven Practice** — Uses formative insights and student artifacts to refine instruction and strengthen implementation clarity.
- **Ongoing Development** — Delivers continued refreshers, resources, and in-class support to sustain quality and momentum over time.

When educators thrive, students thrive.





When schools and partners work together, students thrive.

When schools invest in SmartLab, they gain more than a program—they gain partners in sustaining student success.

Sustainability goes beyond equipment. SmartLab keeps facilitators supported, students engaged, and communities connected, ensuring each lab remains a driver of readiness and STEM identity. Through ongoing partnership and professional learning, SmartLab helps schools adapt to changing needs and opportunities. This long-term approach transforms SmartLab from a single investment into a lasting foundation for future-ready learning.



Sustain Excellence

Sustain instructional quality through ongoing professional learning that supports educator readiness and continuity through staffing changes.



Empower Students

Seamlessly access curriculum with unlimited student licenses to LearningHub, and inspire hands-on learning and innovation.



Maximize Impact

Partner with our Success Team to align your program with your goals, driving meaningful outcomes for your students.



Fuel Innovation

Leverage your SmartLab Innovation Fund of up to \$4,500 to expand learning through new curriculum, PD, or added technology.

Partnerships Create Lasting Connections

SmartLab helps schools connect with sponsors to support funding and long-term impact. When schools build these partnerships, students gain access to real tools, current curriculum, and mentors who introduce them to future careers. Sponsoring organizations gain community visibility, stronger ties to schools, and a role in shaping tomorrow's workforce. Sponsorship may include a full lab, program enhancements, or volunteer time. In every form, it sustains student engagement and gives partners the opportunity to invest in education and their future talent pipeline.





STEM initiatives that lack sustained partnerships

and community engagement often struggle to survive beyond initial funding, while those with long-term partnerships are significantly more likely to sustain implementation over time¹.

¹Creating a Sustainable Partnership Between a Science Center and Schools (CORD, 2022) <https://files.eric.ed.gov/fulltext/EJ1325638.pdf>



Each SmartLab we fund is another step towards fulfilling our mission... we never know the impact this exposure may have on a child, and many times attending a school with a STEM curriculum lights a spark that encourages a career in STEM. These children are the future problem solvers, inventors, doctors, and designers and we are proud to support them!"

— Deanna Campos-Miller, President, Campos Foundation | Denver, CO



Integrated resources and centralized support drive facilitator success.

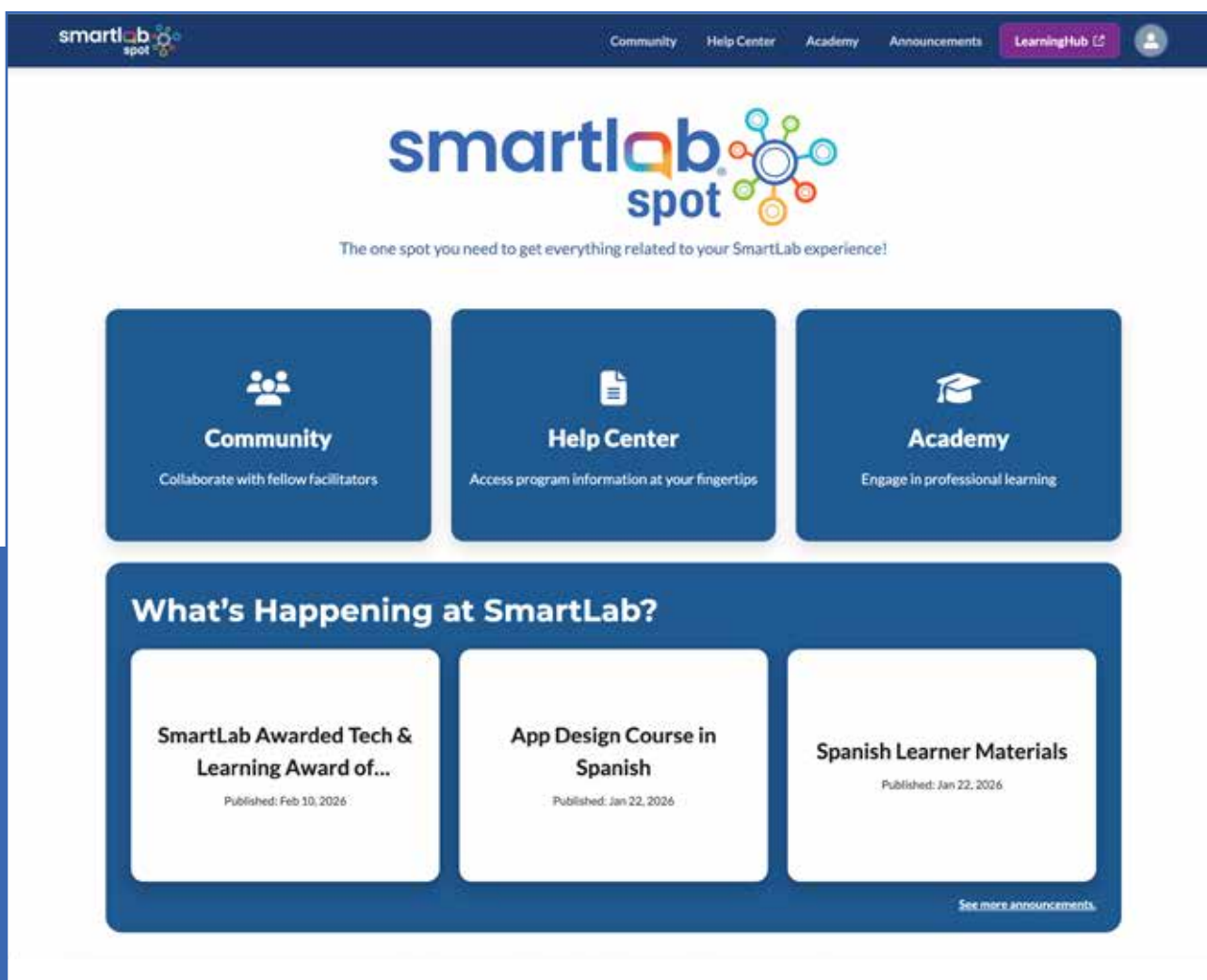
A new way to access, manage, and experience SmartLab support.

SmartLab Spot brings the SmartLab ecosystem into one unified platform—connecting facilitators, professional learning, resources, and support in a single, streamlined experience. Designed to simplify access and strengthen ongoing support, it serves as a central spot where everything facilitators need lives in one place. From LearningHub to classroom resources to real-time support, SmartLab Spot removes the need to navigate multiple systems.

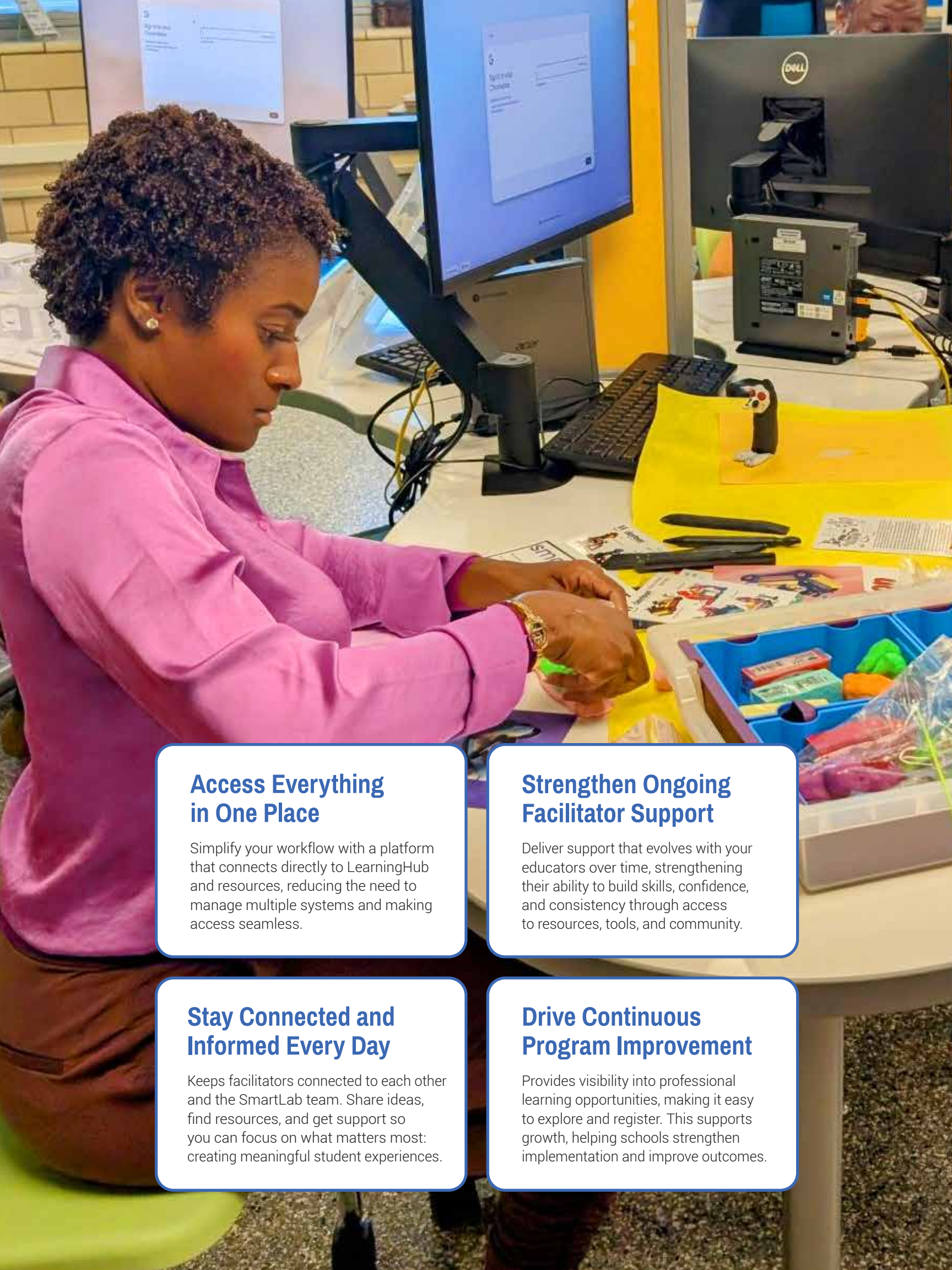
With a direct line to submit and track support requests, along with integrated access to tools and professional learning, facilitators can quickly find what they need and stay focused on what matters most—engaging students in meaningful, hands-on STEM learning. By reducing complexity and strengthening connection across the ecosystem, SmartLab Spot helps schools maintain program quality, respond to evolving needs, and extend impact across classrooms and communities.

Stay Updated. Stay Connected.

Get the latest SmartLab announcements and engage with a network of facilitators sharing ideas and support.



SmartLab Spot. One place. One ecosystem. Endless potential.

A woman with curly hair, wearing a pink long-sleeved shirt and a gold watch, is seated at a desk in a classroom or office setting. She is looking down at a yellow folder or paper on the desk. In front of her are two computer monitors; the one on the right displays a software interface with a 'SmartLab' logo. To her right, there is a blue storage bin filled with various colorful supplies like markers and erasers. A small penguin figurine sits on the desk near the bin. The background shows other computer monitors and office equipment.

Access Everything in One Place

Simplify your workflow with a platform that connects directly to LearningHub and resources, reducing the need to manage multiple systems and making access seamless.

Strengthen Ongoing Facilitator Support

Deliver support that evolves with your educators over time, strengthening their ability to build skills, confidence, and consistency through access to resources, tools, and community.

Stay Connected and Informed Every Day

Keeps facilitators connected to each other and the SmartLab team. Share ideas, find resources, and get support so you can focus on what matters most: creating meaningful student experiences.

Drive Continuous Program Improvement

Provides visibility into professional learning opportunities, making it easy to explore and register. This supports growth, helping schools strengthen implementation and improve outcomes.



From initiative to impact. SmartLab is built for the long term.



61% of teachers report that initiatives “come and go” at their schools,¹ and few Pre-K–12 STEM initiatives sustain after initial funding ends.²

Meeting tomorrow's workforce needs takes more than a one-off program, workshop, or equipment purchase. The SmartLab ecosystem integrates all five components—curriculum, hands-on tools and equipment, purposeful learning environments, professional development, and sustained support & partnership—into a unified ecosystem. This alignment builds consistent, career-connected experiences that strengthen students' skills and identities over time.

Let's give your students a lasting STEM advantage.

Districts that plan for sustainability from the start are more likely to make new practice the “new normal.”³

¹RAND Corporation, 2020. https://www.rand.org/pubs/research_reports/RRA134-1.html

²National Academies, 2024. <https://nap.nationalacademies.org/catalog/27091>

³Wallace Foundation, 2025. <https://www.wallacefoundation.org/knowledge-center/Pages/sustaining-educational-initiatives.aspx>.



Our district's ability to go from limited or inconsistent STEM instruction to fully operational labs with consistent curriculum across all of our elementary schools has been a phenomenal transformation. SmartLab's turnkey solutions allowed us to move quickly to implement a district-wide STEM program, which meant the students weren't waiting 3–5 years for us to decide what “STEM” would look like...Now, our students are problem-solving through creative and collaborative learning each day. These skills are relevant today and will be imperative for our students' future success and the success of our district-wide programming goals.”

—Bryan Frazier, Superintendent, Claremore Public Schools, Claremore, OK



Collaborative partnerships shape the workforce of tomorrow.

We extend our heartfelt gratitude to the private funders whose generous contributions have been instrumental in bringing SmartLab programs to schools. Their support has enriched educational experiences, providing students with innovative, hands-on learning opportunities that bridge STEM applications and real-world industries.



Join the movement!





Contact SmartLab



© 2026 SmartLab | 1801 Lefthand Circle, Longmont, Colorado 80501 | www.smartlablearning.com | 800.458.2880

