



SOUTHWEST ALABAMA

STEM ECOSYSTEM

info@swalstem.org

www.swalstem.org

251-518-8903

Leadership Team:



Lindsey Coker

Ecosystem Lead
STEAMCamp for Kids



Ken Robinson

Ecosystem Co-Lead
Alabama School of
Math & Science



Dr. Jason Ford-Green

Ecosystem Co-Lead
Bishop State
Community College



Tammy Ruffin

Ecosystem Co-Lead
Little Angels, Inc.

Steering Committee Members:



Felicia Henderson
Bellingrath Gardens



Evelyn D'Angelo
Longleaf Consulting



Bettsie Norton



Haleigh Spragg
City of Mobile



Amanda Richardson
University of South Alabama



Kacie Hardman
Baldwin County Schools

Region 7 Stakeholders

Business:

Go Explore Math & Science (GEMS) Program
QuikFits Wellness and Fitness
Hargrove Engineers
STEAMCamp for Kids
The Wharf
Volkert & Associates
Novelis Corporation

Government:

Alabama Technology in Motion/USA
City of Mobile, AL Parks and Recreation
Alabama Department of Commerce
NOAA: National Oceanic & Atmospheric Administration

Higher Education:

Bishop State Community College
University of South Alabama Career Development Office
University of South Alabama
Orange Beach Elementary School
Coastal Alabama Community College
AMSTI USA

Region 7 Stakeholders

K-12 Schools:

Bay Minette Elementary
Barton Academy for Advanced World Studies
Mobile County Public Schools
Pelican's Nest/FEEF
Alabama School of Math and Science
Gulf Shores City Schools
Cottage Hill Christian Academy
Theodore High School
Floretta P. Carson Visual and Performing Arts
Academy
Conecuh County Jr. High School

Non-Profit Organizations:

Bellingrath Gardens & Home
Little Angels, Inc.
Mobile Chamber
Longleaf Consulting
SAWDC AlabamaWorks
Innovation Portal
Exploreum Science Center
Boys & Girls Clubs of South Alabama
Supporting Educational Excellence in Daphne's
Public Schools
American Chemistry Society

Out of School Providers:

Learning Campus at Gulf State Park
Dauphin Island Sea Lab
STEAMCamp for Kids
STEM for Kids

About Us



The Southwest Alabama STEM Ecosystem is a vibrant network of community members, educators, business leaders, and organizations dedicated to ensuring our region's children and families thrive. Rooted in the southwest portion of Alabama and founded in 2024, we are committed to expanding access to rich STEM learning experiences and workforce opportunities. By working together, we aim to inspire, prepare, and empower the next generation of innovators, problem-solvers, and leaders in our community.

Mission:

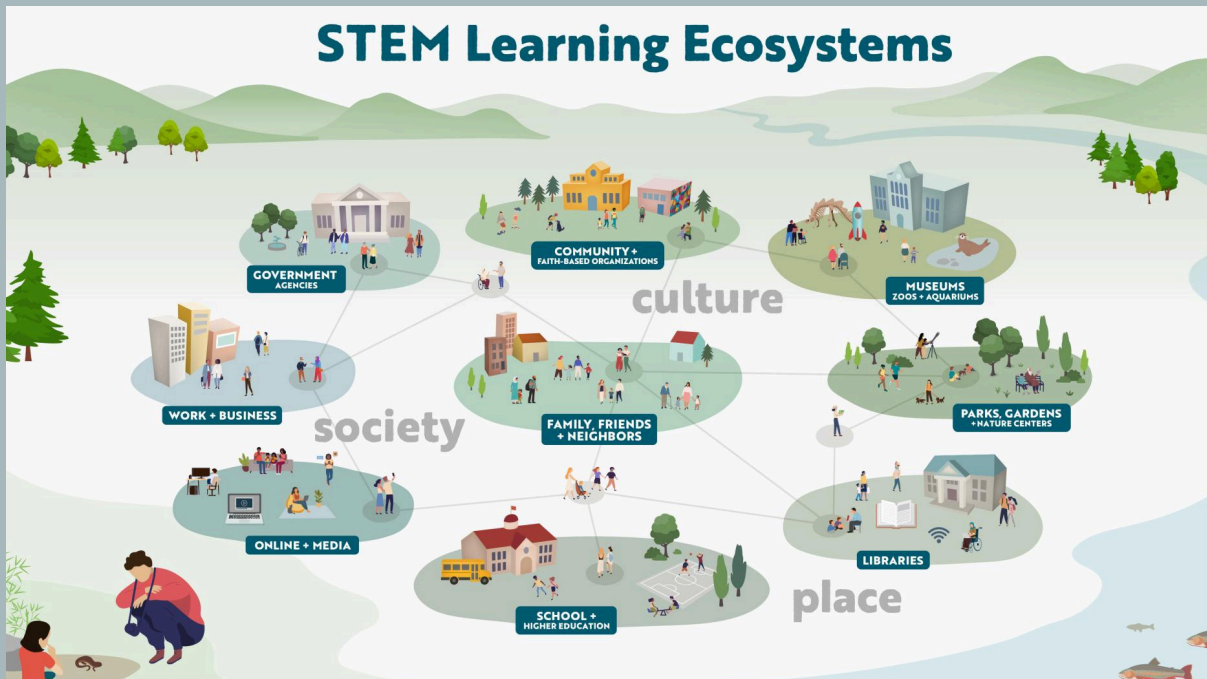
Our mission is to inspire, equip, and connect individuals through education and collaboration, supporting the growth of a resilient workforce that thrives in today's evolving landscape.

Vision:

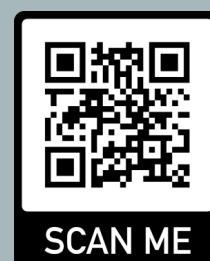
We recognize each student has a unique set of skills and talents. we aim to connect them to meaningful STEM and workforce opportunities that enhance their lives and strengthen our communities.

What is a STEM Ecosystem?

A STEM ecosystem is a network of organizations and individuals working together to support and enhance STEM (Science, Technology, Engineering, and Mathematics) education and career pathways in a specific region or community. It's about collaboration between key players who influence STEM learning both in and out of school.



In January 2025, the Southwest Alabama STEM Ecosystem joined the National STEM Learning Ecosystem Community of Practice. This national organization provides support, shares best practices and tools and facilitates cross-sector and nationwide collaboration. SWAL Stem participates in monthly meetings with this organization and a yearly in-person meeting. To learn more click here or scan the QR code.



<https://stemecosystems.org>

Alabama's Workforce

The most recent data (Dec. 2024) from the Alabama Department of Labor indicates a robust job market with record-high employment and wage levels. However, the labor force participation rate remains below the national average, suggesting potential untapped labor resources.

Sectors such as education, health services, leisure, hospitality, and government are experiencing significant growth, highlighting areas where workforce development efforts could be concentrated

Our Regional STEM Ecosystem is committed to working with our stakeholders and community members to ensure K-12 students are receiving rich STEM Experiences and workforce development opportunities.

To view the most recent labor department data and workforce folders by County, click below or scan the QR code.

**25 Fastest Growing - Region 7
ACCCP 2023-2024
Demand Occupations Summary Tables**

Career Cluster	Occupation Title	Average Annual Growth Rate	Average Annual Openings
Health	Nurse Practitioners	4.18%	60
Manuf	Engine & Other Machine Assemblers	3.74%	20
Hospitality	Cooks, Restaurant	3.66%	770
Manuf	Aircraft Structure, Surfaces, Rigging, & Systems Assemblers	3.30%	35
Manuf	Molders, Shapers, & Casters, Except Metal & Plastic	3.20%	20
STEM	Aerospace Engineers	3.10%	15
Health	Medical & Health Services Managers	2.99%	150
TransDistrLog	Logisticians	2.88%	45
Health	Physical Therapist Assistants	2.60%	55
IT	Web Developers	2.58%	15
Manuf	Plating Machine Setters, Operators, & Tenders, Metal & Plastic	2.52%	15
LawPubSfty	Paramedics	2.44%	30
IT	Information Security Analysts	2.30%	15
STEM	Mechanical Engineers	2.21%	55
Business	Training & Development Specialists	2.20%	45
Manuf	Grinding, Lapping, Polishing, & Buffing Machine Tool Setters, Operators, & Tenders, Metal & Plastic	2.18%	25
STEM	Chemical Engineers	2.15%	15
HumSvcs	Substance Abuse, Behavioral Disorder, & Mental Health Counselors	2.11%	70
LawPubSfty	Emergency Medical Technicians	2.03%	40
STEM	Industrial Engineers	1.96%	70
Manuf	Cabinetmakers & Bench Carpenters	1.92%	30
Health	Occupational Therapists	1.88%	15
AgFood&NR	Pest Control Workers	1.86%	75
Manuf	Industrial Machinery Mechanics	1.83%	265
Manuf	Extruding & Drawing Machine Setters, Operators, & Tenders, Metal & Plastic	1.79%	20

Alabama Department of Labor, Labor Market Information Division 2021-2031 projections in cooperation with the U.S. Bureau of Labor Statistics.
The demand occupations published by the Alabama Department of Labor, Labor Market Information Division now align with the definition of demand occupations developed by the Alabama Committee on Credentialing and Career Pathways (ACCCP).



SCAN ME

<https://drive.google.com/drive/folders/1ENFPgN7pKEVrDnkQWcyInw9yX432dSPi?usp=sharing>

2025 Goals

Phase 3: Implementation



INCREASE ECOSYSTEM AWARENESS:

Grow public knowledge and recognition of our STEM Ecosystem by promoting our mission, partners, and programs through social media, local media, newsletters, and community presentations.



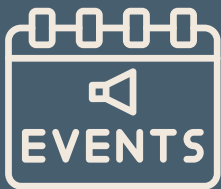
ENGAGE RURAL COMMUNITIES

Expand access to STEM learning opportunities in rural areas by building local partnerships, hosting “lunch and learn” events, and supporting rural schools and organizations.



PARTNER WITH COMMUNITY ORGANIZATIONS

Strengthen and formalize collaborations with libraries, museums, non-profits, after-school providers, and workforce agencies to create a broad network that supports STEM learning across ages and settings.



PARTICIPATE IN EVENTS AND OUTREACH:

Actively represent the STEM Ecosystem at local, regional, and state events — including career fairs, science festivals, education conferences, and business roundtables — to promote STEM learning and Workforce Development.



STRENGTHEN FINANCIAL STABILITY

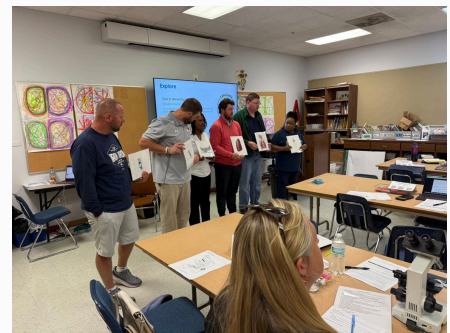
Develop a diversified funding strategy by securing grants, building corporate sponsorships, and exploring revenue-generating activities to ensure the long-term growth and stability of the STEM Ecosystem.

Get Involved

1	BECOME A STAKEHOLDER: Join our Ecosystem network to stay informed, collaborate on projects, and help shape the future of STEM learning in our region.
2	SHARE YOUR PROGRAM, BUSINESS OR OPPORTUNITY: Tell us about your STEM or workforce related activities so we can promote them through our network and build stronger connections across the community.
3	PARTICIPATE IN COMMUNITY EVENTS Represent the Ecosystem at STEM fairs, career days, festivals, and outreach events to help grow awareness and support for STEM education and Workforce Development.
4	COMPLETE ONE OF OUR INDUSTRY-SPECIFIC SURVEYS Take a few minutes to complete one of our industry-specific surveys and
5	DONATE Consider making a donation to support programs, outreach, and sustainability efforts.

To view these opportunities and more, visit
our website at www.swalstem.org

Region 7 Partners in Action



Region 7 Partners in Action

