STEM TODAY, SUCCESS TOMORROW



October 17, 2023 CAJUNDOME & Convention Center, Lafayette

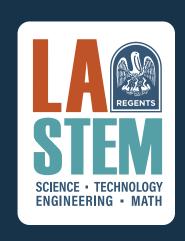


Table of Contents

Welcome	3					
Schedule At a Glance						
Keynote Speaker						
Summit Agenda	7					
» General Session Information	7					
>> Breakout Session 1	8					
>> Breakout Session 2	11					
>> Breakout Session 3	14					
>> Breakout Session 4	17					
Exhibitors	19					
Summit Maps	20					
Regional Directors						
Additional Information						
Sponsors						

Welcome

On behalf of the Louisiana Board of Regents, I am delighted to welcome you to Lafayette for the 2023 LASTEM Summit! This year's Summit, our first outside of Baton Rouge and only the second since the pandemic, will be our biggest yet.

We are excited that you will have the opportunity while at the Cajundome to learn more about LASTEM's ongoing work in all aspects of STEM education and training, our ever-expanding engagement with industry and community partners, and our efforts to build prosperity across Louisiana through cutting-edge STEM education and opportunities.

Since its founding LASTEM has been powered by collaboration, best exemplified in events like this Summit, where stakeholders come together to learn from one another and advance our collective work. This year's theme, STEM Today, Success Tomorrow, focuses on our efforts to build a strong STEM education-to-employment pipeline to ensure students of all ages, interests, and backgrounds have the tools and training to secure the high-demand and high-wage careers needed to drive our state's economy and enhance the future of Louisiana and her people.

We encourage everyone to embrace this chance to meet colleagues and counterparts from all regions in the state, witness and even join in on innovative demonstrations and most importantly, watch our amazing student participants at work. All nine Regional LASTEM directors are in attendance, so please visit the Regional STEM Centers booth to introduce yourself and hear directly from some of the most passionate and dedicated STEM advocates in Louisiana.

The agenda is packed with exciting activities, with highlights including:

- Panel discussions of major topics in STEM education, training, and workforce development
- 30+ breakout sessions
- A student-led robotics live competition (my favorite!)
- Esports demonstrations
- Teacher workshops
- Regional STEM outreach vehicles
- 40+ vendor, non-profit, and student club booths

We invite you to participate in events throughout the day, as you learn new things, experience STEM-centered activities, and engage with the universe of stakeholders who make LASTEM work. We hope you leave the Cajundome today energized about building a stronger STEM ecosystem across Louisiana and armed with ideas and information to help you do just that.

Enjoy the Summit!

Dr. Kim Hunter Reed Commissioner of Higher Education



SCHEDULE

At a Glance

	ACADIA	BLUES	CAJUN	EVANGELINE	GOSPEL	IBERIA
Session 1 10:45-11:30		Energy Poverty Solved: Giving 1.2 Billion People Electricity	Playing Around with Physics	Bringing a VR- Based Skilled Trades Program to the Public	STEM Literacy Resource Guide	Once Upon a STEAM Time: Making and Tinkering Experiences Inspired by Children's Picture Books
Session 2 1:00-1:45	La Stem-u-lating Mentorships Across Our Louisiana Regions	Improving PK-8 Education in Louisiana through STEM: STEM Pathways Jr. and STEM Adventures	Inspiring the Next Generation of Scientists and Engineers: Tulane Center for K-12 STEM Education	R4SNC: A Multifaceted Approach to Providing Access to Quality STEM Education	How to Offer High-Quality Computing Courses at No Cost to Your School	Introduction to VEX GO for Elementary Students
Session 3 2:00-2:45		Cybersecurity Awareness for All K-8 Students	Unleashing Creativity and Innovation: Making and Tinkering for STEAM-rich Learning in PreK- 3rd Grade	Empowering Minds, Building Futures: Exploring the Flagship Initiatives of GNOrocs	You Can't Be What You Can't See: STEM/ CS/CTE Career Awareness with Learning Blade	Building Engineering Literacy
Session 4 3:00-3:45		Educating a Next Generation of Problem Solvers with PreK-8 Engineering			How to Leverage Your Community and Business Stakeholders	The Blueprint: Creating Your Own District- Wide STEM Challenge

4

GENERAL SESSIONS - CAJUNDOME

Opening Welcome

Commissioner of Higher Education,

8:30AM - Dr. Kim Hunter Reed

9:00AM & Dr. Clint Coleman

Commissioner igher Education, Kim Hunter Reed

Keynote Presentation – Unleashing Passion, Purpose, and Performance in Younger Generations

9:00AM - 10:30AM Mark Perna

Lunch -

Transformative Impact and Capacity Building: AmeriCorps Service in the Louisiana STEM Project

11:45AM - Summer Dann & Dr. Clint Coleman

Closing Remarks

4:00PM - 4:30PM Dr. Clint Coleman

JAZZ	ST. LANDRY	ST. MARTIN	ST. MARY	VERMILLION	ZYDECO
Leveraging Coursera to Improve STEM Education and Employment Outcomes	Creating STEM Excitement: Bringing a STEM Challenge to Life	LOSFA's Student Engagement Division and Statewide Virtual Student Network Groups	RECIPE for Rural STEM	Engaging Students in Meaningful STEM Through Community Partnership	STEM Education
Promoting Girls	Harnessing the	Bars Without	It's Your CHOICE -	Teaching and	Youth Minds and
in STEM through CS4U	Power of AI and the Future of Work	Barriers: Turning Prisoners into STEM Role Models for their Children	College Credit or Not: An exciting New Pilot for Louisiana High Schools	Modeling Oil Exploration in the Classroom	Smart Mapping
Louisiana's Math Refresh: Improving K-12 Math in Louisiana	Careers in the National Weather Service	SeaPerch ROVs	Art & Wellness: VISTA Center and the LASM	Bringing Coastal Issues into the Classroom: Watermarks360 Virtual Field Trip	Creating a Louisiana STEM Education Asset Map for Educators, Nonprofits, and Industry
				_	
STEM For All - The Time is Now	Supporting the K- Career Pipeline: Industry's Role	Amazon and the MSY NODE	Postsecondary STEM Education Correlation: Curriculum Efficacy and Entry-Level Job Competency	Seamless K-8 STEM Curriculum Based on Simple Engineering Principles	Grab and Go Science in the 21st-Century Classroom

Keynote Speaker

Mark Perna, Keynote Speaker

Speaker, Author, and CEO TFS Results

Mark C. Perna is the founder and CEO of TFS Results, a strategic consulting firm leading the national paradigm shift in education and workforce development. Mark, who works daily with local and regional organizations at the tactical level, created the Education with Purpose & Employment with Passion movement to help communities connect their education, business, and economic pipelines.

Mark is an acclaimed and inspiring public speaker who has spoken at Harvard University by special invitation. Today, he delivers more than 70 keynote speeches annually across North America, where he frequently brings audiences to their feet.

As a noted generational expert, Mark often interviews on radio, television, and podcasts. He contributes weekly at Forbes.com, where his articles and leadership videos reach an audience of more than 3.3 million. He also serves on the Advisory Council for the Coalition for Career Development in Washington, DC.

Through his podcast The Perna Syndicate, Mark's message is heard in more than 60 countries every weekday. His bestselling book, Answering Why, received 8 national awards and has empowered countless parents, educators and employers to unleash the true potential of today's young people.

Mark is the father of two successful young people. Find out more about Mark's work at MarkCPerna.com.







General Session Information

Schedule Overview

7:45 am - 8:30 am	Registration
8:30 am – 9:00 am	Opening Welcome
9:00 am – 10:30 am	Keynote Mark Perna
10:45 am – 11:30 am	Breakouts
11:45 am – 12:45 pm	Lunch General Session
1:00 pm – 1:45 pm	Breakouts
2:00 pm – 2:45 pm	Breakouts
3:00 pm – 3:45 pm	Breakouts
4:00 pm - 4:30 pm	Closing Remarks

CAJUNDOME | 8:30 am - 9:00 am

Opening Welcome

CAJUNDOME | 4:00 pm - 4:30 pm

Closing Remarks

CAJUNDOME | 9:00 am - 10:30 am

Keynote Presentation - Unleashing Passion, Purpose, and Performance in Younger Generations

Join dynamic education expert Mark C. Perna to discover the game-changing strategies that are shifting the education paradigm nationwide. With clear action steps that you can implement immediately, Mark will help you forge a human connection with young people, move them from static to active purpose, and empower them to achieve at a higher-level. Today's young people have incredible potential to change the world. We just have to unleash it!

PRESENTER



Mark Perna Speaker, Author, and CEO TFS Results

CAJUNDOME | 11:45 am - 12:45 pm

Lunch - Transformative Impact and Capacity Building: AmeriCorps Service in the Louisiana STEM Project

This panel discusses AmeriCorps programs, specifically the VISTA program, under the Corporation for National and Community Serivce (CNCS) . VISTA service members, under the LASTEM initiative, will share about their projects in stakeholder engagement, data collection and resource library development.

PANELISTS

Judd Jeannsonne, Volunteer Louisiana Wendy Conarro, Northshore Regional STEM Center Jessica Deville, Audubon Education Natalie Ray, Louisiana State University Camila Valenzuela, Capital Area STEM Network Center

MODERATORS



Summer DannDirector
Capital Area STEM Network Center



Dr. Clint ColemanProgram Administrator of LASTEM
Louisiana Board of Regents

Breakout Session 1

BLUES ROOM | 10:45 am - 11:30 am

Energy Poverty Solved: Giving 1.2 Billion People Electricity

We developed a new way for electricity to fly; delivering electricity to your residence or business for 1/100th of the cost. Voltage drop across two wooden pencils creating a new weatherproof Step Down transformer.

PRESENTER



Donald Esteen STEM Teacher East Baton Rouge Parish School System

CAJUN ROOM | 10:45 am - 11:30 am

Playing Around with Physics

Exploring the use of toys as a fun and inexpensive tool for teaching physics. Toys can be used to demonstrate a variety of physics concepts, including kinematics, Newton's Laws, energy, and waves. By using toys in the classroom, students can engage in hands-on learning experiences that make physics more accessible and enjoyable.

PRESENTER



Tracy HenryPhysics Teacher/Science Department Head
Beau Chene High School/ St. Landry Parish School Board

EVANGELINE ROOM | 10:45 am - 11:30 am

Bringing a VR-Based Skilled Trades Program to the Public

With the decrease in skilled trade jobs in recent years, Interplay Learning has developed a skilled trades program that is completely virtual to help facilitate learning a trade. But, how does the public not only know you have the resource, but also know what it is? Join the East Baton Rouge Parish Library as we walk through how EBRPL was able to reach out to the public with SkillMill, the VR and simulation based trades program.

PRESENTER



Wesley Morgan Librarian I East Baton Rouge Parish Library

GOSPEL ROOM | 10:45 am - 11:30 am

STEM Literacy Resource Guide

The demand for STEM has never been higher in Louisiana. This is evident in our afterschool programs where aquaponics, robotics, and Lego sessions are filled to capacity. LACAL has designed a resource guide for these programs, connecting literacy support with the exciting experiential learning opportunities included in STEM activities. The guide features a variety of STEM literacy resources and activities for programs to include in their literacy support and academic tutoring sessions.



Andrew GanucheauDirector OST Quality
Louisiana Center for Afterschool Learning

Breakout Session 1

IBERIA ROOM | 10:45 am - 11:30 am

Once Upon a STEAM Time: Making and Tinkering Experiences Inspired by Children's Picture Books

Less than 1/2 of Louisiana's children in grades K-3 are reading on grade level. Research indicates that children's early experience builds brain architecture and lays the foundation for one's lifelong thinking skills and approach to learning, both critical roots of STEM success. This session introduces the use of picture books as a springboard for early STEAM learning for children in PreK-3rd grade. Examples of books along with innovative STEAM activities will be shared.

PRESENTER



Cate HeromanEarly Childhood Consultant
Knock Knock Children's Museum

JAZZ ROOM | 10:45 am - 11:30 am

Leveraging Coursera to Improve STEM Education and Employment Outcomes

A discussion of leveraging Coursera learning resources to serve students in grades 6-12, post-secondary, and workforce educational arenas. Through a partnership with the online learning organization, our SciTEC division and Region 8 SCILS LASTEM Center is utilizing the resource to partner with educational, state, and business leaders, such as Google, to meet the significant STEM educational and employment gaps in Louisiana.

PRESENTER



Dr. Lindsey Keith-VincentAssociate Dean for Research, Outreach, and Innovation Louisiana Tech University College of Education and Human Sciences

ST. LANDRY ROOM | 10:45 am - 11:30 am

Creating STEM Excitement: Bringing a STEM Challenge to Life

Are you looking for a way to get students interested in STEM through a fun and exciting morning or afternoon of STEM competitions? Look no further. Participants will hear the story of how one district brought a STEM challenge with over 200 student participants to life and receive descriptions of events and scoring possibilities. Help bring the STEM excitement to your class, school, or district!

PRESENTER



Candace BreauxCareer Academy Supervisor
West Baton Rouge Schools

ST. MARTIN ROOM | 10:45 am - 11:30 am

LOSFA's Student Engagement Division and Statewide Virtual Student Network Groups

The Louisiana Office of Student Financial Assistance (LOSFA), a Program of the Louisiana Board of Regents, strives to be Louisiana's first choice for college access by promoting, preparing for, and providing equity of college access. This session will introduce conference attendees to LOSFA's Student Engagement Division and provide information about the statewide Virtual Student Network Groups designed to connect students with similar interests and majors to professionals within STEM.

PRESENTER



Charnell TademyStudent Engagement Specialist
Louisiana Office of Student Financial Assistance

Breakout Session 1

ST. MARY ROOM | 10:45 am - 11:30 am

RECIPE for Rural STEM

RECIPE for Rural STEM allows us to create STEM experiences for people of all ages, understanding that the RECIPE can be different from parish to parish and city to city. Jennifer will share the research she has done and a recipe book of ideas for the participants. The recipe book will allow participants to go back to their communities and cook up STEM experiences that are Relevant, Educational, Career Minded, Impactful, Purposeful, and Engaging.

PRESENTER



Jennifer DePriestDirector of CenlaSTEM
Northwestern State University - Region 6 STEM Center

VERMILLION ROOM | 10:45 am - 11:30 am

Engaging Students in Meaningful STEM through Community Partnership

STEM NOLA's mission is to grow future innovators, creators, and entrepreneurs through inspiration, engagement, and exposure to opportunities in the fields of Science, Technology, Engineering, and Math (STEM). During this session, attendees will participate in one of STEM NOLA's interactive, hands-on learning experiences. In addition, an overview of how STEM NOLA has connected all stakeholders in the community to enable students to engage with all types of STEM learning will be provided.

PRESENTER



Jamie SachsChief Learning Officer
STEM NOLA

ZYDECO ROOM | 10:45 am - 11:30 am

STEM Education

This session discusses the importance of programs like STARBASE in engaging students in STEM learning and education.

PRESENTERS



Annette Phillips

Director
STARBASE Jackson Barracks,
Louisiana Education Programs with NGB

Co-Presenting with:

Justin Brosnahan Deputy Director, STARBASE Jackson Barracks

Breakout Session 2

ACADIA ROOM | 1:00 pm - 1:45 pm

La Stem-u-lating Mentorships Across Our Louisiana Regions

A roundtable discussion, gathering regional members from industry, education, and government to generate ideas of how employers, educators, and state agencies can work collaboratively to provide mentorship opportunities to girls and women pursuing STEM-focused education and STEM field careers.

PANELISTS

Jessica Stegall, Danos Elizabeth Beckham, Turner Industries Group, LLC Crystal Lovelady, Shell USA Inc. Sarah Haneline, BASF Renee Phillips, NAPA Auto Parts Darylene Pugh, Shell Catalysts & Technologies, LP Baraynia Robillard, ExxonMobil

PRESENTER



Alison BordelonSystem Director of Industry Aligned Career Pathways
The Louisiana Community and Technical College System

BLUES ROOM | 1:00 pm - 1:45 pm

Improving PK-8 Education in Louisiana through STEM: STEM Pathways Jr. and STEM Adventures

Are your teachers excited to teach STEM but not sure where to begin? Look no further! The LSU Cain Center for STEM Literacy has developed STEM courses (STEM Pathways, Jr.) and STEM modules (STEM Adventures) for use in PK-12. These materials help develop STEM identity in children and help students develop skills and knowledge they need to grow and flourish in today's society. We will share the exciting projects going on at the Cain Center and how you and your team can be a part of it.

PRESENTER



Nicole FosterMiddle and Elementary STEM Coordinator
LSU Gordon A. Cain Center for STEM Literacy

CAJUN ROOM | 1:00 pm - 1:45 pm

Inspiring the Next Generation of Scientists and Engineers: Tulane Center for K-12 STEM Education

The Tulane Center for K-12 STEM Education seeks to connecting Tulane and the New Orleans community, engaging students through hands-on STEM experiences, and inspiring confidence in the next generation. The Center serves 4000 students and teachers annually by providing hands-on learning opportunities for underserved youth to engage in learning, experimenting, and interacting with the latest technologies to build 21st century skills as well as high-quality professional development.

PRESENTER



Erica Smith

Professor of Practice of PreK-12 Education Program/ Academic Director of Center for K-12 STEM Education Tulane University Center for K-12 STEM Education

EVANGELINE ROOM | 1:00 pm - 1:45 pm

R4SNC: A Multifaceted Approach to Providing Access to Ouality STEM Education

The purpose of this presentation is to give an inside look at the Region 4 STEM Network Center (R4SNC) and its efforts to advocate and provide quality STEM education. The R4SNC's primary goals are to 1. Provide STEM Access 2. Remove Barriers to STEM Access and 3. Build STEM Networks. This presentation displays how the R4SNC not only focuses on students, but also teachers, and industry/community partnerships to advance STEM education in the Acadiana area and across the state of Louisiana.



Angela BoxieDirector of Region 4 STEM Network Center
LaSTEM/UL Lafayette

Breakout Session 2

GOSPEL ROOM | 1:00 pm - 1:45 pm

How to Offer High-Quality Computing Courses at No Cost to Your School

Jobs requiring computing skills are projected to see the largest 10-year growth among all professions in Louisiana. BRBytes is funded by the U.S. Department of Education and the National Science Foundation to study the effects of computing courses on Algebra I LEAP scores. Our courses are part of the Louisiana Department of Education STEM-Computing Pathway. In 2022-23 we supported 75 schools and over 5,000 students. We will describe our courses and how to offer them at no cost to your school.

PRESENTER



Dr. Juana MorenoDirector BRBytes Program
Louisiana State University and A&M College

IBERIA ROOM | 1:00 pm - 1:45 pm

Introduction to VEX GO for Elementary Students

Participants will explore how to use VEX GO in their classrooms. VEX GO is an affordable construction system that teaches the fundamentals of STEM through fun, hands-on activities that help young students perceive coding and engineering in a fun and positive way!

PRESENTER



Gene WilliamsTeam Engagement Manager/National Grant Specialist Robotics Education & Competition Foundation

JAZZ ROOM | 1:00 pm - 1:45 pm

Promoting Girls in STEM through CS4U

This session highlights the work of the SCILS Region 8 LASTEM Center in supporting girls in STEM through its CS4U (Computer Science for You) program. The experience will provide an overview of elements of the program as well as its success as an official CSforALL Commitment. The SCILS team will also introduce its Girls in STEM statewide initiative which includes the relaunch of the Louisiana Girls Collaborative in partnership with the National Girls Collaborative Project.

PRESENTER



Cathi Cox-BoniolDirector of the SCILS Region 8 LaSTEM Center
Louisiana Tech University

ST. LANDRY ROOM | 1:00 pm - 1:45 pm

Harnessing the Power of AI and the Future of Work

In a rapidly evolving technological landscape, the integration of Artificial Intelligence (AI) has emerged as a transformative force, reshaping industries, and revolutionizing the way we approach various challenges. This presentation delves into the demystification of AI, uncovers the impact of AI across diverse domains, and explores its unique potential in driving STEM education.



Dr. Joshua SonnierDirector, Analytics and Intelligence
CGI Federal

Breakout Session 2

ST. MARTIN ROOM | 1:00 pm - 1:45 pm

Bars Without Barriers: Turning Prisoners into STEM Role Models for their Children

This program connects incarcerated fathers with their children to do hands-on STEM. Sci-Port educators teach STEM communication strategies and fun, hands-on activities to soon-to-be-released offenders in the Re-Entry program at the Caddo Parish Sheriff's Office. Offenders are more confident in engaging their children in science, and families are reunited with a positive, educational learning experience. In partnership with Director David Boone from Caddo Correctional Office Re-Entry program.

PRESENTERS



Dr. Heather KleinerDirector, Northwest LaSTEM Innovation Center - Region 7
Sci-Port Discovery Center

Co-Presenting with:

David Boone Director, Northwest Regional Reentry Facility, Caddo Parish Sheriff's Office

ST. MARY ROOM | 1:00 pm - 1:45 pm

It's your CHOICE - College Credit or Not: An Exciting New Pilot for Louisiana High Schools

The LSU Choice Credit model trains high school teachers to deliver college-level courses at no risk to the students. Students who are satisfied with their final grade can elect to have it transcribed by LSU. There is no penalty for declining transcription!

PRESENTERS



Kaleb GardnerProject Coordinator
Capital Area STEM Network / LSU Gordon A. Cain Center for STEM Literacy

Co-Presenting with:

Jonathan Gardner Program Manager, Louisiana State University and A&M College

VERMILLION ROOM | 1:00 pm - 1:45 pm

Teaching and Modeling Oil Exploration in the Classroom

The petrochemical industry is of vital importance to Louisiana's economy, but teaching how oil is found and extracted is not found in any curriculum. In this session, we will look at how a lab activity allows students to model the process of finding and drilling for oil, and see the economic costs of the drilling processes. Attendees will get to see how the activity actually works through hands-on activities.

PRESENTER



Loren KleinGifted Science/Engineering Teacher
Paul Breaux Middle School
Lafayette, LA

ZYDECO ROOM | 1:00 pm - 1:45 pm

Youth Minds and Smart Mapping

Our first objective is to present through case studies the wide range of GIS tools and applications available to every school nationwide at no cost (a \$10K value per school). Our second objective is to engage educators and participants of, 'How to Build a Story Map'. This is our complimentary, entry-level lesson plan built for all to be successful within one class session.



Fran HarveyDirector and GISP
Global Geospatial Institute

Breakout Session 3

BLUES ROOM | 2:00 pm - 2:45 pm

Cybersecurity Awareness for All K-8 Students

Join us to learn how to incorporate cybersecurity into elementary and middle school classrooms. Participants will dive into age-appropriate cybersecurity lessons that can be easily integrated into what is already being taught. Activities help students understand basic cybersecurity topics, such as passwords, digital footprints, cyberbullying, layered security, Wi-Fi hygiene, encryption, and more. K-12 educators will leave with access to no-cost lessons by CYBER.ORG and cyber career profile cards.

PRESENTER



Brittany PikeAssociate Director of Cybersecurity Content
CYBER ORG

CAJUN ROOM | 2:00 pm - 2:45 pm

Unleashing Creativity and Innovation: Making and Tinkering for STEAM-rich Learning in PreK-3rd Grade

As participants in Knock Knock Children's Museum's Making Spaces professional development program, PreK-3rd grade educators will share how they laid the foundation for early STEAM in their classrooms and integrated making and tinkering into their daily practices to help develop student agency through an increase in fine motor, problem solving, and critical thinking skills.

PRESENTERS



Alexandra Pearson

Associate Director of STEAM Innovation Knock Knock Children's Museum

Co-Presenting with:

Jessica Gafford Kindergarten Teacher, Northwestern Elementary School/Zachary Community Schools

Candy Jones Director, Learning Innovation, Knock Knock Children's Museum

Paige Zittrauer Instructor, Knock Knock Children's Museum/University Lab School

EVANGELINE ROOM | 2:00 pm - 2:45 pm

Empowering Minds, Building Futures: Exploring the Flagship Initiatives of GNOrocs

This presentation provides a comprehensive overview of the Greater New Orleans Region One Center for STEM (GNOrocs) flagship initiatives, demonstrating their impact on the Greater New Orleans Region and beyond. By embracing innovation, collaboration, and inclusivity, GNOrocs has ignited a passion for STEM education, fostering a new generation of trailblazers ready to tackle the challenges of tomorrow.

PRESENTER



Daphine BarnesDirector of STEM and Economic Mobility
GNO, Inc.- Region | Center for STEM (GNOrocs)

GOSPEL ROOM | 2:00 pm - 2:45 pm

You Can't Be What You Can't See: STEM/CS/CTE Career Awareness with Learning Blade

Learning Blade, a free statewide STEM career awareness program, contains hundreds of science lessons connecting to real-world STEM careers. Lessons are aligned to Louisiana science standards for grades 5-9. In addition, teachers can use dozens of lesson plans that support innovative project-based learning. Sign up for your free account provided at www. learningblade.com/LA



Scott Mains Learning Blade State Manager Learning Blade

Breakout Session 3

IBERIA ROOM | 2:00 pm - 2:45 pm

Building Engineering Literacy

Often times the focus of STEM education interventions is to show improvements in math and science learning outcomes, but STEM is so much more! Just because a student scores well on EOC tests or takes Dual Enrollment math and science courses does not mean they will necessarily enter into STEM fields. This presentation will take a closer look at the idea of building and using engineering literacy to increase the number of students pursuing STEM careers.

PRESENTER



Vanessa Begat Assistant Director LSU Gordon A. Cain Center

JAZZ ROOM | 2:00 pm - 2:45 pm

Louisiana's Math Refresh: Improving K-12 Math in Louisiana

The Louisiana Department of Education recently launched the Math Refresh Initiative. Come and learn more about the initiative, new policy, impacts, and how the Department plans to continue supporting school systems as we work toward positively impacting student growth and teacher knowledge.

PRESENTER



Jamie HebertDirector of Math
Louisiana Department of Education

ST. LANDRY ROOM | 2:00 pm - 2:45 pm

Careers in the National Weather Service

This presentation will discuss the position infrastructure in the National Weather Service, and what these positions are responsible for.

PRESENTER



Doug Cramer Warning Coordination Meteorologist National Weather Service

ST. MARTIN ROOM | 2:00 pm - 2:45 pm

SeaPerch ROVs

SeaPerch is an underwater robotics program that aims to reduce traditional barriers to participation in robotics programs and promotes opportunities to engage students and educators in inquiry-based learning with real-world applications.



Kim Kaufman LA Master Trainer SeaPerch

Breakout Session 3

ST. MARY ROOM | 2:00 pm - 2:45 pm

Art & Wellness: VISTA Center and the LASM

Louisiana Tech University's VISTA (Visual Integration of Science Through Art) Center and the Louisiana Art & Science Museum (LASM) collaborated on an art exhibit to engage the viewers in discussions of health. Students collaborated with scientists and community partners to create artwork that calls attention to issues of physical and mental health. The LASM organized tours, panel discussions, STEAM (Science, Technology, Engineering, Art, and Mathematics) and health events, around the exhibit.

PRESENTERS



Dr. Jamie NewmanAssociate Professor, Biology
Louisiana Tech University

Co-Presenting with:

Tracey Barhorst Curator and Public Programs Manager, Louisiana Art & Science Museum

Nicholas Bustamante VISTA Center Director and Professor, Louisiana Tech University

Tom Futrell Associate Professor & Chair, Graphic Design, Louisiana Tech University

Beth Welch Assistant Curator and Museum Preparator, Louisiana Art & Science Museum

VERMILLION ROOM | 2:00 pm - 2:45 pm

Bringing Coastal Issues into the Classroom: Watermarks360 Virtual Field Trip

WaterMarks360's virtual field trips and curriculum/activity guides are free, open-source materials that support NGSS/LSSS standards and STEM education by highlighting Louisiana's coastal crisis and wetland restoration efforts. The virtual field trip platform can be used in formal and informal education settings with any age group and content area. The curriculum guide is written at a 6th-grade reading level and supports middle school NGSS/LSSS standards with an emphasis on standards in Grade 8.

PRESENTERS



Lauren LeonpacherOutreach Coordinator

Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)

Co-Presenting with:

Jacqueline Richard Program Manager/Associate Professor, Nunez Community College

ZYDECO ROOM | 2:00 pm - 2:45 pm

Creating a Louisiana STEM Education Asset Map for Educators, Nonprofits, and Industry

In this session, attendees will learn about the EdOpportunities Database (EdOpportunities.org), which is a platform adopted by 3+ of the LASTEM Regions. The Database is an Asset Map of all providers of STEM education to workforce pipeline opportunities in Louisiana.

Industry and Nonprofit attendees will be able to use the tool to add new providers and opportunities for their region. School and education attendees will use the tool to identify opportunities and providers relevant to their classrooms. Attendees will be invited to provide feedback on functionality needed to develop the tool further.



Todd WackermanExecutive Director
STEM Library Lab

Breakout Session 4

BLUES ROOM | 3:00 pm - 3:45 pm

Educating a Next Generation of Problem Solvers with PreK-8 Engineering

To create a generation of innovative problem solvers we need to engage youth in engineering activities. Engineering education promotes development of an engineering mindset—the values, attitudes, and thinking skills associated with engineering. This presentation uses a striking collection of candid short videos to show what engineering looks like at the PreK-8 level, and how classroom engineering develops students' facility with engineering practices.

PRESENTER



Christine Cunningham Senior Vice President, STEM Learning Museum of Science, Boston

GOSPEL ROOM | 3:00 pm - 3:45 pm

How to Leverage Your Community and Business Stakeholders

This presentation will demonstrate how to optimize your stakeholders and highlight initiatives that were found to be effective in the Capitol Region.

PRESENTER



Tonnisha EllisSenior Manager of Education and
Workforce Policy and Research
Baton Rouge Area Chamber

IBERIA ROOM | 3:00 pm - 3:45 pm

The Blueprint:

Creating Your Own District-Wide STEM Challenge

Attendees will learn the steps and resources needed to have a K-12 district-wide STEM Challenge. The STEM challenge is scaled appropriately for each grade-level and is tailored for the community in which the students live. It is a large district event and is completed over a semester.

PRESENTER



Dr. Kristen Antoine-MorseScience Curriculum Supervisor
East Baton Rouge Parish School System

JAZZ ROOM | 3:00 pm - 3:45 pm

STEM For All - The Time is Now

Engineering design and STEM projects can be difficult to link to science content when you are pressed for time. This session explores science content-rich STEM projects that will have all of your students eager for more! This session also reinforces why now is the time to engage with and have students explore STEM concepts!



Stacy Thibodeaux Chemistry/Robotics Teacher, STEM Enthusiast Lafayette Parish School System - Southside High School

Breakout Session 4

ST. LANDRY ROOM | 3:00 pm - 3:45 pm

Supporting the K - Career Pipeline: Industry's Role

As the largest non-profit, academic, healthcare system in Louisiana, Ochsner Health recognizes its responsibility to support the next generation of healthcare professionals. Ochsner Education Outreach has invested in programming that drives student confidence in STEM and empowers intentional career decision making. This presentation will showcase the importance of industry's participation in early workforce preparation, highlighting partnerships with education that foster a career pipeline.

PRESENTER



ST. MARTIN ROOM | 3:00 pm - 3:45 pm

Amazon and the MSY NODE

How it all starts.

PRESENTER



ST. MARY ROOM | 3:00 pm - 3:45 pm

Postsecondary STEM Education Correlation: Curriculum Efficacy and Entry-Level Job Competency

This study investigates and seeks the root cause of the central phenomenon that contemporary postsecondary STEM curricula is inadequate to fully prepare graduates for STEM industry's real-world technical performance expectations. Responsible investigation must ensue otherwise a betrayal of the truth will endure.

PRESENTER



VERMILLION ROOM | 3:00 pm - 3:45 pm

Seamless K-8 STEM Curriculum Based on Simple **Engineering Principles**

This presentation targets K-8 teachers who seek simple yet impactful lessons for in-school and/or after-school programs that challenge the natural creativity of young minds by investigating widely familiar real-world problems. This session will present a seamless K-8 curriculum that is based on simple engineering principles designed to tap into the student's creative, physical, cognitive, emotional and social skills.

PRESENTER



ZYDECO ROOM | 3:00 pm - 3:45 pm

Grab and Go Science in the 21st-Century Classroom

Experience Central Creativity's award-winning "Grab and Go"® pedagogy that is revolutionizing the science classroom! Join us for an exciting exploration where attendees conduct experiments, collaborate, and reflect on best practices for hands-on science. Leave equipped with a valuable collection of resources and ready-to-use materials to seamlessly integrate into your classroom. Don't miss this chance to ignite your students' passion for science and revolutionize your teaching approach.

PRESENTERS



Jenny McLeod Chief Operating Officer Central Creativity **Co-Presenting with:**

Rhye McLeod Chief Technology Officer, Central

Exhibitors

Amplify

Barobo

BASF

Best Buy for Business and Education

Bossier Parish Community College

Fast Enterprises, LLC - Camp Code for Girls

Central Creativity, LLC

Coastal Wetlands Planning, Protection, and Restoration

Act (CWPPRA)

CYBER.ORG

EVERFI

ExxonMobil

FIRST Louisiana-Mississippi

Girls Who Code

KidWind Project

LA Department of Wildlife & Fisheries

LA DOTD/AASHTO Stem Outreach Solutions:

TRAC and RIDES Program

LATM and LSTA

Learning Blade

LIGO/Caltech

Louisiana 4-H

Louisiana Environmental Education Commission

Louisiana Office of Student Financial Assistance (LOSFA)

Louisiana Scholastic Esports Federation (LASEF)

Louisiana School for Math, Science, and the Arts

Louisiana State University of Alexandria

Louisiana Wing Civil Air Patrol

Louisiana Workforce Commission

McGraw Hill

NAPA Auto Parts

NASA ASTRO CAMP Community Partners

National Center for Science Education

Northshore Brain Food Truck (Mobile Lab)

Northshore Technical Community College

(Mechatronics Mobile Lab)

Ochsner Health System

Ozobot

Pathful

Project Lead The Way

Quality Science & Mathematics (QSM) Grants

REC Foundation

RoboNation

Skill Struck

South Louisiana Community College

STEM Education LLC

STEM Library Lab

STEM NOLA

STEM Sports

STEMM-Up: Southern University and A & M College and

Louisiana Rehabilitation Services

Technical Training Aids

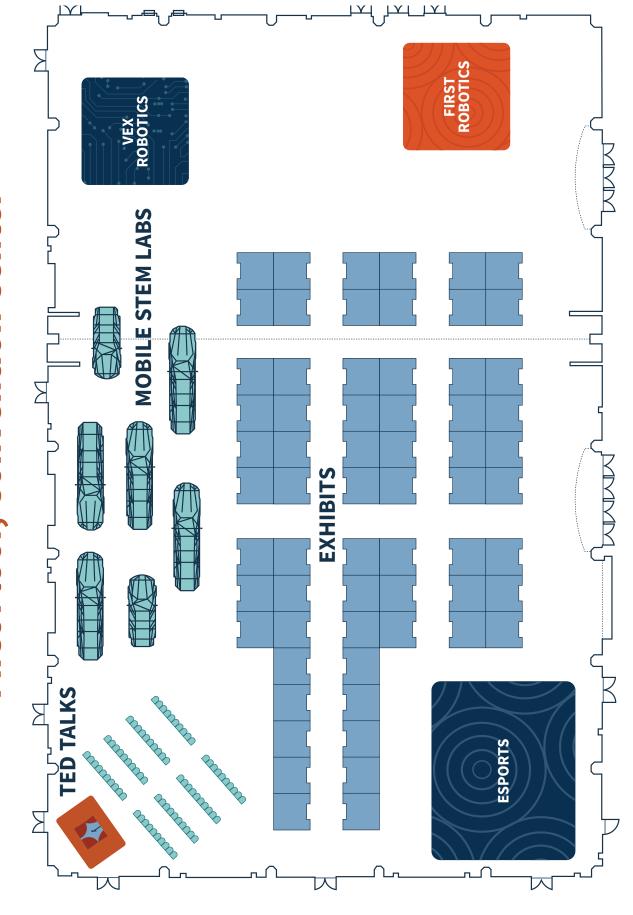
Terysa Solves It

University of Louisiana Monroe School of Sciences and

ULM Museum of Natural History

VBIdeas

The Playground First Floor, Convention Center



Social, and Competitive Esports **STEM is for Every Student Curriculum Resources Secondary Classroom** 11:25 am - 11:40 am 10:45 am - 11:00 am 11:05 am - 11:20 am **Workforce Readiness TED Talks** 2:10 pm - 2:25 pm 1:30 pm - 2:30 pm 1:50 pm - 2:05 pm **Shoutcasting/Commentating Demo Public Coaching & Teaching Session** Rocket League / Smash Showcase & **Shoutcasting/Commentating Demo Public Coaching & Teaching Session** Rocket League/Smash Showcase & **Competition Continues** 10:45 am - 11:30 am **Competition Begins** 9:45 am - 10:30 am 1:15 pm - 2:00 pm 2:15 pm - 3:00 pm Esports 9:30 am 1:00 pm **VEX Robotics Qualification Matches Qualification Matches** 11:00 am - 11:30 am 1:00 pm - 2:00 pm 2:10 pm - 2:30 pm 3:00 pm - 3:45 pm **Alliance Selection** Finals Match 2:00pm Q&A Sign up for Q&A and Grant One-on-**Ones with the Program Directors FIRST Robotics**

Esports: Its More Than Just a Game

Scholastic Esports Careers &

Throughout the Day **Demonstrations**

Q&A

CTE Applications of Esports in the

Gen Tech Leaders through Scholastic, Federation: a Network to Grow Next **Louisiana Scholastic Esports**

2:30 pm - 2:45 pm

Rocket League & Smash Showcase/

3:15 pm - 3:45 pm

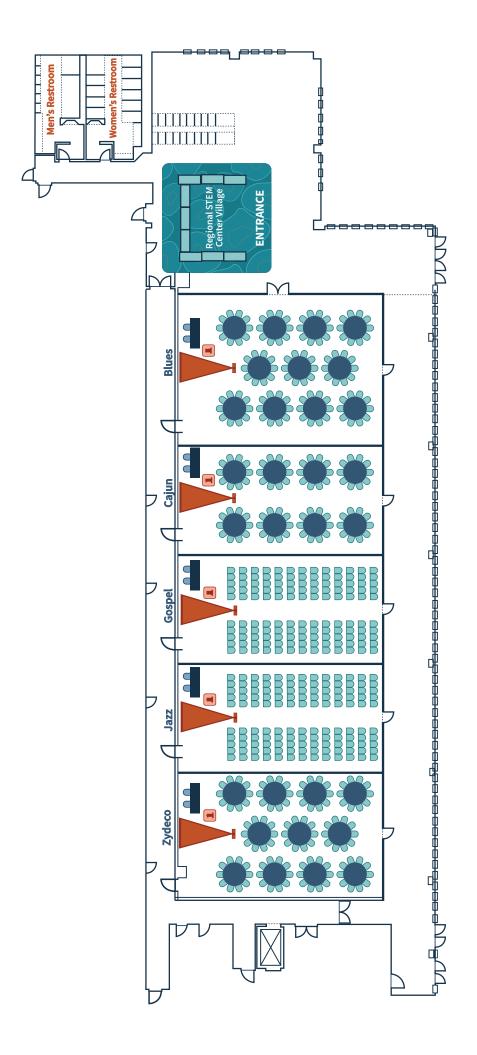
Competition Finals & Awards

FIRST in the Classroom: FIRST Tech **Challenge and FIRST Lego League Class Packs and Alignment**

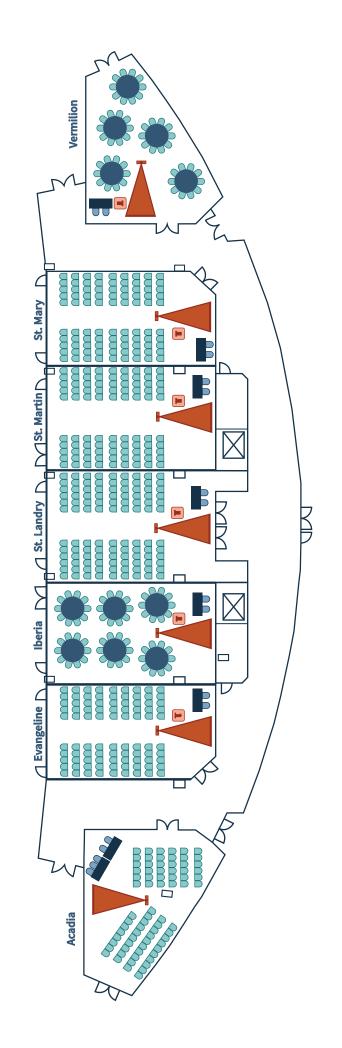
2:50 pm - 3:05 pm

FIRST After School: FIRST Tech **Challenge and FIRST Robotics Competition Teams**

Second Floor, Convention Center Festival Ballroom



Mardi Gras Ballroom Cajundome



Regional LASTEM Center Directors



Daphine Barnes
Region 1
Greater New Orleans, Inc.
New Orleans



Angela Boxie
Region 4
University of Louisiana at Lafayette
Lafayette



Dr. Heather KleinerRegion 7
Sci-Port Discovery Center
Shreveport



Summer Dann
Region 2
Louisiana State University and A&M College
Baton Rouge



Mark Areneault
Region 5
Calcasieu Parish School Board
Lake Charles



Cathi Cox-Boniol Region 8 Louisiana Tech University Ruston



Christie Landry
Region 3
Fletcher Technical Community College
Houma



Jennifer DePriest Region 6 Northwestern State University Natchitoches/Alexandria



Wendy Conarro
Region 9
Southeastern Louisiana University
Hammond

Additional Information

WI-FIPlease enjoy complimentary
Wi-Fi throughout the Summit.

SSID: LA Stem

Password: stem23#!

Nearby Dining Options

0.8 mi Agave Mexican Restaurant525 Bertrand Dr

Lafayette, LA 70506

1.5 mi Spoonbill Watering Hole & Restaurant 900 Jefferson St Lafayette, LA 70501

1.8 mi Drago's Seafood Restaurant 3151 Johnston St Lafayette, LA 70503 2.0 mi
Zea Rotisserie & Bar
235 Doucet Rd
Lafayette, LA 70503

2.2 mi Cafe Bella 301 Heymann Blvd Lafayette, LA 70503

2.6 mi Don's Seafood 4309 Johnston St Lafayette, LA 70503

Thank You Sponsors

STEM Advocate







STEM Supporter

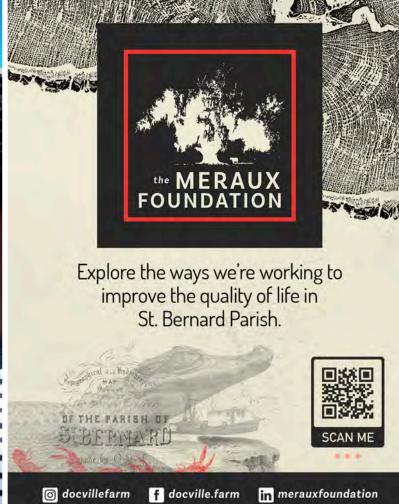
















BatonRougePublicAffairs@ExxonMobil.com | ExxonMobilBR.com



FREE ACCESS TO 400+ MIDDLE SCHOOL STANDARDS-ALIGNED STEM/CS/CTE LESSONS



Learning Blade is an online, supplemental STEM / CS / CTE career awareness system



- Builds CS / STEM awareness and interest
- Add up to 100 STEM careers and technologies to Quest for Success
- Meets CTE Perkins V for career exploration
- Aligns to state's 5-9 grade standards



20-Hour "Intro to Coding" resources

- Introduces algorithms, coding, and more
- Robust teacher resources
- Explores common IT careers



SIGN UP FOR YOUR FREE ACCOUNT:

www.LearningBlade.com/LA info@LearningBlade 423-521-2309



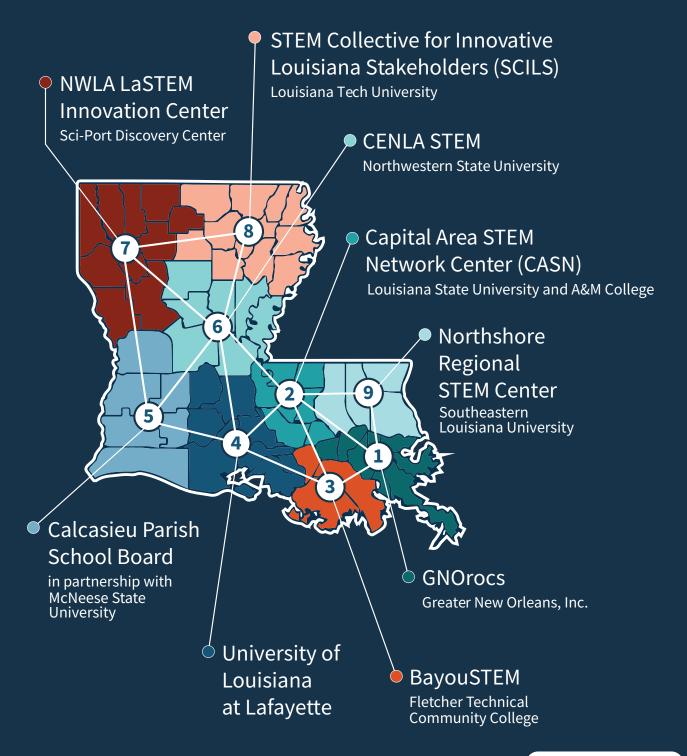


Get started at recf.org

support@recf.org

(903) 401-8088





What is LASTEM?

The LASTEM network is a system of nine Regional STEM Centers (RSCs) strategically positioned across Louisiana whose goal is to connect education and workforce opportunities in their regions and throughout the state.

