LASER

February 2024

LSTA NEWSLETTER



Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.

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President's Message

Members of Louisiana Science Teachers Association,

I hope you all are enjoying the Mardi Gras Season. Between king cakes, masquerade balls and catching beads, don't forget to check out the LASER for monthly updates featuring professional development opportunities and highlights from all regions across Louisiana.

The LSTA Board is excited about the upcoming year. We met at the Louisiana Art and Science Museum in Baton Rouge for our first meeting of 2024 on Saturday, January 20th. During our meeting we discussed the upcoming NSTA National Conference, which will be held November 6-9, 2024 in New Orleans at the New Orleans Ernest N. Morial Convention Center. Please save this date and plan on joining us!

To promote the NOLA 24 Conference, myself and a few board members will be attending the NSTA National Conference that is being held in Denver, Colorado on March 20-23, 2024. LSTA will have a table set up in the exhibit hall and I would like to invite all LSTA members attending the conference to assist us in promoting this New Orleans event. Please contact me if you are interested in volunteering your time.

LSTA advocates for our students. The LSTA website has a quick link to our facebook page that features information for student opportunities. For example, applications are being accepted for LUMCON's Estuarine Awareness and Discovery (LEAD) camp. This is a week-long residential camp designed to give high school students a chance to scientifically explore Louisiana's coastal environments. The focus of this camp is to increase student understanding and appreciation of marine science by allowing them to utilize LUMCON's world class research vessels, oceanographic equipment, laboratories, and science staff. For more information and the application, visit this <u>site.</u>

Applications have now opened for the Future Coastal Leaders initiative. This program was created to prepare the next generation to preserve our coast. High school and college-aged students are guided through a series of meetings and learning experiences that provide a broad understanding of coastal land loss and plans for restoration, offer insight into careers, and connect them to professional networks and like-minded peers. The next Future Coastal Leaders cohort will focus on:Louisiana's Land Loss Crisis, Environmental Justice, Advocacy and Public Policy and Coastal Careers. For more information and the application, visit this <u>site.</u>

LSTA wants to be a part of the journey you take as you share your love for science with your students. Please consider sharing some of the wonderful things that happen in your classroom and throughout your district with your Regional Representative or complete the form <u>here</u> so we can post it in the LASER.

Remember, everywhere else, February 13th is just another Tuesday, but for us Fat Tuesday is the BEST day of the week! Laissez les bons temps rouler and enjoy this amazing month of February!

Sincerely,

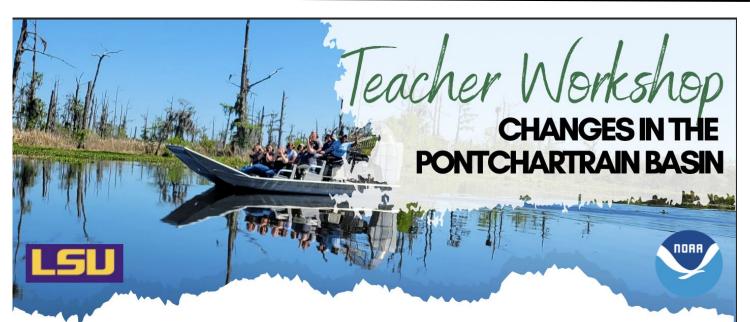
Bianca Deliberto

Dr. Bianca Deliberto



LOUISIANA SCIENCE TEACHERS ASSOCIATION NEWSLETTER

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About the Professional Development

Science and social studies teachers will participate in hands-on fieldwork and learn skills for teaching English Language Learners. Teachers will explore the historical and ecological changes in the Pontchartrain Basin due to climate change and its effect on the environment. In addition to the summer workshop, teachers will participate in two (compensated) virtual trainings throughout the following year.



Program Highlights

- Learn skills and strategies for teaching ELLs
- Work alongside subject matter experts
- Explore the different habitats in the basin and examine the changes that have occurred
- Have facilitated, guided lesson plan development
- Receive continuing education credit
- All lodging, meals, and activities are included at no cost to the participant
- \$300 in participant stipends (per year)

Registration

Dates:

- Northshore May 30 June 2, 2023
- Southshore July 23-26, 2024

To register: https://lsu.qualtrics.com/jfe/form/SV_3OuXBGbZgQSlpcy Due to limited spaces, the priority deadline is March 1, 2024

Here and 3



NEED's annual National Energy Conference for Educators is accepting applications for our July 7-11, 2024 conference that will be hosted in Philadelphia, PA. Sponsorship is available for PreK-12 Louisiana teachers, so don't delay in submitting an application to attend!

Participants receive the training and materials to implement innovative hands-on energy units in their classrooms, multi-disciplinary teams, and Out-of-School Time (OST) programs. NEED facilitators at the conference help participants develop specialized units that meet state standards and can be utilized with students of all learning styles.



LOUISIANA SCIENCE TEACHERS ASSOCIATION NEWSLETTER

Keep Louisiana Beautiful Hosts Educational Workshops for Educators of Grades K-5 Workshops to Focus on Youth Environmental Stewardship and Community Engagement

Keep Louisiana Beautiful (KLB), in alignment with its mission to promote clean and sustainable communities, announces the opening of registration for comprehensive educational workshops for classroom educators of grades K-5 in the parishes of Ouachita, LaFourche, and Orleans. The workshops will offer valuable insights into youth environmental stewardship and community engagement.

Scheduled workshop dates and locations are as follows:

- February 17, 9 a.m. 2 p.m., Ouachita Parish at Tower Place, 1500 N. 19th St., Monroe
- March 9, 9 a.m. 2 p.m., LaFourche Parish (location TBA)
- March 16, 9 a.m. 2 p.m., Orleans Parish at Audubon Zoo at 6500 Magazine St., New Orleans

Space is limited to 50 participants per workshop. Registration is available online.

<u>KLB is pleased to offer stipends for up to \$150 for teachers participating.</u> Teachers who attend and stay for the duration of the workshop will receive a \$50 stipend. Teachers have the opportunity to earn an additional \$100 to implement the lessons.

"America is in the midst of one of the most profound and rapid societal shifts in history," says Susan Russell, Executive Director of KLB. Today's generation of children is the first to grow up indoors. Their "plugged-in" lives are often devoid of exploring the natural world. As tomorrow's leaders, they need to be equipped for the challenges the future brings and it is our responsibility to prepare our children for the future they will inherit. That requires a commitment to providing our children with an environmental education." The desired result of this program is an increase in knowledge and awareness that yields a positive change in perceptions, attitudes, and behaviors related to caring for the environment and community.

The workshops and lessons will cover a range of topics including:

- impact of litter on wildlife
- reducing waste in your personal life
- plastic pollution
- microplastics
- mapping litter at school
- recycling, reusing, and reducing
- watersheds



At the end of each lesson, students will be encouraged to apply what they learned from each lesson by participating in student-driven activities. These interactive sessions, led by experienced environmental educators, Dr. Pam Blanchard and Dr. Mary Legoria, aim to empower educators to engage young minds and instill a sense of responsibility for environmental stewardship. For further information about the workshops, please contact Valerie Nehrbass-Vidrine via email at education@keeplouisianabeautiful.org.

LOUISIANA SCIENCE TEACHERS ASSOCIATION NEWSLETTER

https://lsta.info/

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LDWF Marine Research Lab, Grand Isle, LA

WETshop is a week long workshop for teachers (formal and informal) to learn about Louisiana's coastal wetlands and become wetland stewards. To learn more about this program visit: wlf.louisiana.gov/page/for-teachers

Registration Opens: January 22, 2024



For more information please contact: Lindsay Seely (225) 765-2375 Lseely@wlf.la.gov

LOUISIANA SCIENCE TEACHERS ASSOCIATION NEWSLETTER

National Geographic Explorer Classroom Returns for 2024!

The Explorer Classroom's live interactive YouTube show connects your students with scientists and storytellers to hear behind-the-scenes stories about their work and ask questions in real-time. This month your class will have the opportunity to learn from photojournalists, scientists and storytellers whose innovation is protecting the wonder of our world. All sessions are free and include an instructional guide to help your class get the most out of the experience, Spanish-language events are included! There will also be time for a Q&A, so come prepared with questions. <u>More info...</u>



USA Science and Engineering Festival Free Resources

The mission of the USA Science & Engineering Festival is to stimulate and sustain the interest of our nation's youth in science, technology, engineering, and math (STEM) by producing and presenting compelling, exciting, and educational STEM events and programs! Browse our library of lesson plans created by educators for educators! All lessons are NGSS and CASEL aligned and designed for middle and high school classrooms.Each lesson links to a compatible X-STEM All Access episode featuring an inspiring STEM role model. View the full lineup of X-STEM All Access episodes HERE.

<u>Climate Change and the Water Cycle Resources</u>

These resources consist of seven distinct activities developed for 6-12 grade students. The activities teach about climate change, the water cycle, and the effects of the changing climate on water resources through the use of games, science experiments, investigations, role-playing, research, and creating a final project to showcase learning. This learning activity takes ten 60 minute class period.



Federal Relief STEM funding

Use this free tool to help you locate STEM funding and grant opportunities available in your community. Funds may be used for a variety of learning activities, such a technology, robotics kits, engineering kits, science kits, makerspaces, or other items that aid in expanding STEM education. These grant opportunities are supported by federal, state, and local organizations like foundations and corporations.

SOCIETY FOR SCIENCE







The Advocate Program is a year-long professional development program that supports educators and mentors who are working to increase the number of students from traditionally underrepresented groups who enter STEM research competitions.

Advocates receive:

- · Training, staff support, and peer mentorship
- A \$3,000 stipend
- All-expense-paid trip to attend the Advocate Training Institute in Washington, D.C.

Applications are open from January - early March.

To learn more about the program, sign-up to be notified when the application opens, or to access the application check out our website.

SCAN HERE





Biomimicry Youth Design Challenge

Looking for a new way to blend biology, ecology, and engineering? The <u>Biomimicry Institute's</u> <u>Youth Design Challenge</u> is a project-based learning experience that asks middle and high school teams to design bio-inspired ideas that can provide solutions to critical real-world problems.

- Registration deadline: March 28, 2024
- Submission deadline: April 3, 2024



Young Heroes Call for Nominations

LPB announces the call for nominations for the 2024 Louisiana Young Heroes program! A Young Hero is defined as an exceptional young person who has excelled in academics, given significantly of themselves through public service, overcome personal adversity, exhibited extraordinary heroism, or inspired others through their deeds and strength of character to become better students, persons, and citizens. Nominations and supporting materials should be submitted <u>online</u>. The deadline for entries is Sunday, March 3, 2024. Learn more at <u>www.lpb.org/heroes.</u>

Louisiana Department Of Health: "Fighting The Flu"

The Louisiana Department of Health's findings reveal heightened flu susceptibility among school-age children, educators, and families, amplifying concerns about flu transmission during the season stretching from late fall to early spring. This risk extends through classrooms, posing a broader threat to teachers and families.

In response, LDH, in tandem with the Louisiana Department of Education and local districts, has crafted a suite of resources to fortify defenses against the flu. This collective effort aims to aid administrators, teachers, parents, and students in combating its impact. Central to this initiative is an educational focus with tailored K-5 lesson plans that empower young learners with vital flu insights, preventive measures, and health tips, available for free download <u>HERE</u>

Ignite Genetic and Genomic Curiosity in Your Classroom with Free Resources

Discover the world of genetics and genomics with FREE educational materials from <u>Genome: Unlocking Life's Code</u>. Discover lesson plans and immersive storyline units thoughtfully created to guide your students on an exciting exploration of genetic concepts. Access these ready-to-use resources and bring the wonders of Genome: Unlocking Life's Code into your classroom today!



National Human Genome Research Institute







with ENGINEERING DESIGN and REAL-WORLD CONNECTIONS







GNO STEM Center

University of New Orleans Oliver St. Pe' Center (TRAC) 2000 Lakeshore Drive

April 6, 2024 8:00 am – 5:00 pm

- Provided by SeaPerch Master Trainer
 - Free of charge
 - Receive Kits for your class
 - \$100 Stipend for Participants

SeaPerch is an innovative underwater robotics program that equips educators and students with the resources they need to build an underwater remotely operated vehicle (ROV) in an inor out-of-school setting.

As an integrated STEM education program, SeaPerch 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. This workshop introduces basic engineering and science concepts and fosters key 21st century skills including critical thinking, collaboration, and creativity.

REGISTER TODAY! https://seaperch.org/dsec-grant-program/

What Educators Say About SeaPerch:

"SeaPerch is everything a teacher could want to implement into their curriculum and classroom. It provides all students an opportunity to experience something that might otherwise never be offered until later in their educational careers. It can create a spark within a student early so that he or she may develop a love for math and engineering and choose classes, books, experiences accordingly."



https://lsta.info/

The Louisiana Dept. of Education is offering a groundbreaking professional development opportunity known as the LDOE Energize Project in partnership with the Northshore Regional STEM Center and Southeastern Louisiana University Computer Science and College of Education.

The LDOE Energize Project is designed for 6th-12th grade Louisiana public and charter school educators to earn their Praxis certification in Computer Science at no cost to teachers. This project covers the registration cost of the 40 hour workshop to ensure a passing score on the Computer Science (5652) Praxis Content Area exam, along with content knowledge guidance, practice exams, support. Upon receiving a passing score, participants will receive a stipend of \$350.

There are five Cohort options available, featuring both virtual and hybrid learning.

LDOE Energize Project cohort workshop dates have been set. Spaces are limited to about 200 per cohort, so once each cohort is filled, it will close. Please mark your calendars with the following dates:

• Cohort 1) Tuesday 6-9



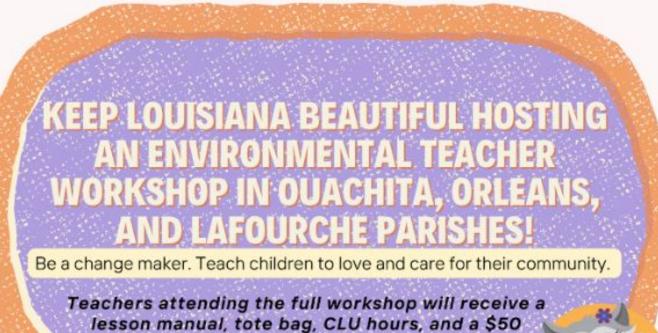
- Starts 3/19 Ends 5/7 with an expectation of 2 additional hrs asynchronous time for a total of 5 hrs per week for a total of 40 hrs
- Cohort 2) Thursday 6-9
 - Starts 3/21 Ends 5/9 with an expectation of 2 additional hrs asynchronous time for a total of 5 hrs per week for a total of 40 hrs
- Cohort 3) Saturday 9-12
 - Starts 3/23 Ends 5/11 with an expectation of 2 additional hrs asynchronous time for a total of 5 hrs per week for a total of 40 hrs
- Cohort 4) Monday 6-9 (3 hrs)
 - Starts 3/25 Ends 5/13 with an expectation of 2 additional hrs asynchronous time for a total of 5 hrs per week for a total of 40 hrs
- Cohort 5) June 3-6
 - (M-Th) 9am-4pm (with a 45 min lunch (27 hrs total) with an expectation of 13 additional hrs asynchronous time for a total of 40 hrs

Visit the site <u>here</u> to register and or obtain additional information.









stipend with the opportunity to earn up to \$150!

OUACHITA PARISH	LAFOURCHE PARISH	ORLEANS PARISH
FEBRUARY 17, 2024	MARCH 9, 2024	MARCH 16, 2024
9 AM - 2PM	9 AM - 2 PM	9 AM - 2 PM
Tower Place	Nicholls State University	Audubon Zoo
1500 N 19th St.	906 E 1st St.	6500 Magazine St.
Monroe, LA 71201	Thibodaux, LA 70301	New Orleans, LA 70118

Registration is required and space is limited to the first 50 teachers, so register today! The workshop requires a \$25 deposit which is reimbursed to you upon attending the workshop. Scan the QR code to the right or visit <u>http://bit.ly/klbworkshops</u> to register today!





For more information, email education@keeplouisianabeautiful.org



Department of Education Launches New Campaign to Elevate the Teaching Profession

The "Teachers: Leaders Shaping Lives" campaign features a new Public Service Announcement (PSA) developed by the Education Department in partnership with TEACH.org and One Million Teachers of Color. The PSA aims to inspire more talented people—especially those from underrepresented communities—to become teachers, while also elevating the teaching profession.

STEM Teaching Tools, Kansas City NSTA Presentations.

During the NSTA 2023 Kansas City Conference the STEM Teaching Tools team and several colleagues were able to present a number of sessions. One of those Conversations about systemic supports for teaching sustainability and climate change topics was facilitated by Louisiana Department of Education staff members Tana Luther, who serves as the LDOE Representative on the LSTA Board and Molly Talbot. Their session provided guidance around collaborating with colleagues, community members, businesses, government, and nonprofits to develop and build supports when teaching climate change.

The STEM Teaching Tools program willingly shares all the materials making them free to teachers who may adapt and use them to improve instruction. So, check out <u>all our</u> <u>slide decks and presentation materials</u>. Individual presentations may be accessed online for work individually, with school or district PLCs.



Cornell Lab: K-12 Education

We want to help you get kids outside and enjoying your backyard, neighborhood, and local parks. Take kids on a habitat scavenger hunt, create a sound map, and test bird ID skills with this adaptable activity book designed to be used by families, school groups, and anyone looking for a fun way to connect to nature. Inspired by the federal Every Kid in a Park initiative and geared towards fourth graders, this step-by-step guide will help you explore our country's diverse habitats and the birds that live there. Have a healthy outdoor adventure with the Explorer's Guidebook! Thanks to a generous supporter, this <u>wonderful bookle</u>t is available as a free download in both English and Spanish!





Explore career opportunities in STEM fields, meet faculty and fellow students and learn about degree programs.

- Biomedical/Microbiology
- Natural Science/Ecology
- Veterinary Science
- Chemistry & Physics
- Mathematics/Engineering

School of STEM

For 9th -12th grade students 8:00 AM - 12:00 PM Northwestern State University Student Union Ballroom



<u>Oakland University Voluntary Study</u>

Are you a K-12 educator who teaches literacy in some capacity, or a youth librarian? If so, we would like to invite you to participate in a study conducted by Oakland University faculty and students that explores the impact of the U.S. sociopolitical context on classroom literacy practices and youth librarian practices. For full details about the study click <u>here</u>.



OctoStudio Explorations

Join us in exploring different ways to combine code with everyday materials as tools for creative expression! The Tinkering Studio is a Key Collaborator with the Lifelong Kindergarten Group at the MIT Media Lab, creators of a free coding application for mobile devices called OctoStudio. Learn more and download OctoStudio. We're using this page to create a growing collection of ideas for tinkering with OctoStudio. Some of these are full-fledged projects; others are little sparks that we hope will ignite your own explorations for what's possible when you look creatively at code!



TULANE UNIVERSITY PRE-COLLEGE PROGRAMS

Tulane University's Center for K-12 STEM Education

Teachers of 3rd through 8th grade students can also participate in BATS and GiST! Thanks to the generosity of Shell and The Joe W. and Dorothy Dorsett Brown Foundation, we are pleased to be able to offer teachers the chance to participate in 3 unique workshops at each event that align with the Louisiana Science Standards! Participating teachers will get to experience the workshop hands on and discuss how to implement the activities and aligned standards into their classrooms.

Teachers will also receive a \$100 stipend, aligned curricula ideas, AND supplies to bring the activities back to their school! Preference is given to teachers from majority free or reduced lunch schools. Registration will open for our spring events on January 29, 2024. A \$20 refundable deposit is required to register. To sign up, please register online <u>here</u>.

JAKLAN UNIVERSIT



Civil Air Patrol's AE STEM Kit Program

FEATURED STEM KIT - BEE-BOT/SPACE ROVER: The Bee-Bot/Space Rover STEM Kit is an exciting kit designed to teach young children entry-level, hands-on coding principles without the use of computers or internet. Recipients will receive one Bee-Bot robot (with associated Skills Mat) and one Space Rover set. An early learning coding tip sheet is available in the Learning Management Systems section of CAP's member portal, eServices, in addition to lessons and additional suggestions to guide the recipients in implementing the wide range of Bee-Bot/Space Rover learning options. Instructors can also use this kit to introduce, teach, and reinforce a variety of subjects. This kit offers a great opportunity for older youth to teach younger students beginning coding skills. The possibilities are endless!

Cyber Connection: This early computer coding kit allows young children to apply skills, such as sequencing, estimation, control, and problem-solving as they begin a path to early cyber knowledge. Learning directional language and algorithms sets the stage for involvement in cyber competitions, such as the Air Force Association's national youth cyber education program, <u>CyberPatriot</u>, and interest in potential cyber careers. Approved applicants can expect to receive one Bee-Bot/Space Rover STEM Kit. For information on how to join Civil Air Patrol and apply, visit the link <u>here</u>.



Louisiana Association of Science Leaders' Corner

Are you a district science supervisor, science content specialist, science master teacher, Teacher Leader or science coach? If so, consider becoming a member of LASL, the affiliate of the National Science Education Leadership Association (NSELA). Watch for information on how to become part of LASL and upcoming Louisiana opportunities. The LASL Corner shares resources for educators supporting teachers in their efforts to improve instruction and teaching skills.



Louis J. Roussel, Jr. Laser



The Little Star That Could

Join Little Star, an average yellow star in search for planets of his own to protect and warm. Along the way, meet other stars, learn what makes each star special, and discover that stars combine to form star clusters and galaxies.

Running time: 35 minutes

Join Us For An **Experience** That's OUT OF THIS WORLD!

FEBRUARY 2024



Our Place in Space

Help solve a crossword puzzle about the sky! The answers lead to an exploration of the Earth and Sun, the rotation of the Earth, the effects of gravity, and the cause of day and night. Take a trip into space to visit the planets in the Solar System and travel beyond the realm of the Milky Way galaxy.

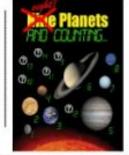
Running time: 32 minutes



Flying Monsters

Set out to uncover the truth about the dinosaur cousin, the pterosaur, with a wingspan of approximately 40 feet and equal to that of a modern-day jet plane.

Running time: 40 minutes



Nine Planets and Counting

How many planets are there in our solar system? Nine, right? Or is it eight? Take a tour to explore the variety of objects that populate our solar system. Examine each planet individually and then step back to look at the big picture. Just what is a planet, anyway? The answer may surprise you.

Running time: 35 minutes

In the late 1950's, Berry Gordy Jr. formed a small Detroit-based record company called Motown Recirds. Their slogan was "The Sound of Young America". Over 40 years laster, this laser show captured the spirit of the Motown sound with recordings from The Temptations, The Four Tops, Jackson 5 and Stevie Wonder among others.

Running time: 45 minutes

Admission:

E-mail hglorioso@kenner.la.us or call 504-468-7231 for information and group rates.

Adults Children/Seniors \$6.00 per show \$5.00 per show

Multi-show package

*Children 2-12 years *Seniors 60 and over

SHOW SCHEDULE SUBJECT TO CHANGE!

Appointment Only: Tues-Fri Schools/Camps/Groups Call 504-468-7231 for reservations.

Schedule:

General Public: Saturdays Only Box Office opens at 10:45 am

es available	The Little Star That Could:	11:00 am	
	Our Place in Space:	12:00 pm	
	Flying Monsters:	1:00 pm	
	Nine Planets and Counting:	2:00 pm	
TO CHANGE!	Laser Motown:	3:00 pm	

Kenner Planetarium 2020 Fourth Street Kenner, Louisiana 70062 www.kenner.la.us 504-468-7231





BUILD CONNECTIONS. LEARN NEW STRATEGIES. ENGAGE WITH RESEARCH. GET INSPIRED!

2024 THEME KINETIC CONNECTIONS

When two objects collide, they briefly "connect," resulting in the transfer of kinetic energy from one to the other. This exchange reveals a fundamental truth:

connections are catalysts for change.

2024 THEME KINETIC CONNECTIONS

At this year's inaugural symposium, we'll celebrate the power of connection in shaping progress and understanding. Collaborations among scientists yield groundbreaking discoveries, educational networks empower the next generation, and social bonds enrich our lives with shared knowledge, ideas, and inspiration.



NEED National Energy Education Development

2024 Louisiana Energy Education Workshop for Educators

Mark your Calendars!

Date and Location

February 28, 2024 LSU AgCenter Botanic Gardens Conference Center 4560 Essen Lane Baton Rouge, LA 70809

Who Should Attend?

- 6th 12th grade science teachers
- CTE Teachers

How Can You Register to Attend?

Please click on the link below to complete registration.

https://needorg.my.salesforcesites.com/event/home/la022824br

Please register 10 days prior to the event.

For The Attendees:

- FREE to attend, thanks to Energy Office support!
- Breakfast and Lunch Provided
- Substitute Reimbursement provided
- Science of Energy Kit delivered post-workshop
- Teaching tips and creative ideas
- Louisiana standards aligned curriculum

Questions:

Contact Wendi Moss at wmoss@need.org or call 1-800-875-5029

About the National Energy Education Development Project

The NEED Project designs and delivers teacher- tested educational materials, evaluation techniques and tools, recognition of student achievement, and professional development for educators. NEED materials and training programs provide comprehensive, objective information about the scientific concepts of energy and the sources of energy – their use and their impact on the environment, the economy and society.

About the Sponsor



Louisiana State Energy Office



GET CERTIFIED TO TEACH COMPUTER SCIENCE!

The Energize Project is seeking 1,000 Louisiana 6th-12th grade public school teachers to get certified in Computer Science.



Are you a K-5th Grade Teacher? The Ignite Project is for you! Visit this link: capitalareastem.org/ignite

TULANE CENTER FOR K-12 STEM EDUCATION



GIRLS IN STEM AT TULANE

Tulane's Girls in STEM at Tulane (GiST) programs provide fifth through seventh grade students with the opportunity to meet and work with undergraduate, graduate, faculty, and professional role models in STEM fields. Workshops developed by faculty and student teams empower students to inquire, investigate, and discover in a positive environment. Our goal is to open the doors wide and welcome young students to careers in STEM fields by encouraging creative thinking, promoting self-esteem, and increasing awareness of the opportunities in STEM that await them.

SATURDAY, MARCH 9, 2024 8:00 A.M. - 3:00 P.M.

Scan the QR Code to register!



Center for K-12 STEM Education Tulane University | School of Science and Engineering 201 Lindy Boggs | New Orleans, LA 70118 K12STEM.tulane.edu | k12stem@tulane.edu | (504) 314-2932

NSTA Resource

Make Learning Fun and Relevant with our Vast Collection of Case Studies Discover the Variety of STEM Topics in the NCCSTS Case Collection Case (only) are freely accessible; <u>subscription</u> is required for access to teaching notes and answer keys. Uncover the power of case-based teaching with NSTA's NCCSTS Case Collection! Freely accessible to all, the Collection provides an excellent opportunity to engage learners in relevant, inquiry-based activities that cover a large variety of STEM topics.

The supplementary teaching notes and answer keys are also available by subscription. Suggested Keywords, to help with your search (besides selecting subjects): high school, middle school, college, upper level, lower level, clicker cases, directed cases, interrupted cases, discussion cases, intimate debate cases. As a reminder, all cases may be adjusted to meet the needs of your student level. Wondering how to teach a case study? We offer free teaching videos, case teaching books, along with an assortment of free teaching resources: <u>NCCSTS</u> <u>Case Collection Teaching Resources Publications | NSTA</u>

APPLY FOR A YEAR-LONG SCIENCE PROJECT ENDING WITH PARABOLIC FLIGHT

Are you a devoted 6th–12th grade classroom teacher passionate about STEM and space sciences? The Embedded Teacher Program (ETP) annually selects ten teachers in two cohorts of five for a year-long immersive space science project culminating in a parabolic flight. ETP prioritizes Title I, rural, and underrepresented communities. Applicants should have over 5 years of STEM teaching experience, a dedication to project-based learning, district support for innovation, and a willingness to engage with stakeholders.

Selected participants receive cost coverage for workshop, lodging, parabolic flight, and travel related to the flight. Apply by March 1, 2024, for the 2024 cohort. Selection notifications will be sent by April 1, 2024, with the workshop scheduled for May 23–25, 2024, at UT Austin Center for Space Research. For inquiries, contact <u>https://spaceforteachers.org/</u>



Opening Your Doors Into Tomorrow.

The Shell Science Lab Regional Challenge, awards prizes and support for science teachers (grades K-12) throughout the U.S. who have found innovative ways to deliver quality lab experiences.

Win up to a \$20,000 lab makeover support package for your school!



WHO: Teachers of grades K–12 in the US
WHAT: The 2023–2024 Shell Science Lab Regional Challenge, a program of NSTA
HOW: Share your exemplary approach to science lab instruction in your school using limited school and lab resources
WHY: \$\$330,000 in prizes will be awarded, including a school science lab "makeover" worth up to \$20,000 for middle and high schools and up to \$15,000 for elementary schools
WHERE: For more information, visit http://shellsciencelab.nsta.org or write to ShellScienceLab@nsta.org

Deadline: March 11, 2024

Learn more about this rich professional development opportunity at

http://shellsciencelab.nsta.org





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Using funding from the Gulf Research Program/Board of Education and Engagement, Dr Emily Adah Miller from the University of Georgia and her team provided a workshop to teachers from Sherwood Forest and Village de l'Est Elementary schools in December. Following the teacher PL Dr Miller and her group spent time co-teaching in the classrooms at the two schools. Dr Miller's Research Project: Adaptations for Climate Change Lessons. The teacher session focused on the elements causing climate change while describing connections to causes and solutions in NOLA. Dr. Christopher B. Mayes, Principal of Sherwood Forest said after the in-school teaching "We are grateful for your partnership and look forward to working together to increasing opportunities for our students' creative mind and learning more ways to improve our environmental conditions and educate our school community on the human behavior impacts on our community's shifting climate."





DE Biology student's in Candice Cerny's class dissect rats at Hahnville High School.



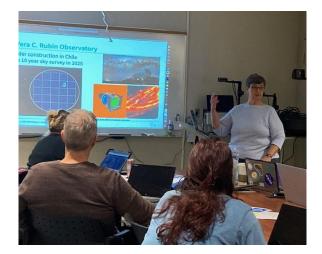
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North Live Oak K students in Ms. Parrinos class constructed enclosures to keep the Gingerbread Man safe from that sly fox.





Ardis Herrold and Justine Schaen with the Rubin Observatory collaborated with William Katzman and his colleagues from LIGO Livingston to provide a recent teacher workshop. The presentation day included two of the Rubin Observatory free online investigations for classroom use: Coloring the Universe using real data along with interactive visualization tool and a Trading Car Activity which promotes STEAM careers. A wonderful lunch was provided by the LIGO team who also provided a tour of the LIGO Livingston facility.









Regional News Manual Region 2

At Park Forest Elementary, students embarked on an immersive exploration guided by the renowned Dr. Brandon Ballengee. Dr. Ballengee, a versatile artist, biologist, and environmental educator from Arnaudville, Louisiana, led the charge, seamlessly blending science with artistry. During the workshop, students delved into the diversity of fish species, unraveled the mysteries of evolution, and honed their skills through hands-on exploration. Dr. Ballengee's eco-educational programs ignited their curiosity, fostering a deep appreciation for the intricacies of our natural world. Under his mentorship, budding artists and scientists alike learned to sketch the graceful contours of aquatic life with newfound precision and passion. Together, they embarked on a journey of discovery, where art, science, and imagination converged to inspire the next generation of environmental stewards.







Eva Legard for Coastal and Environmental Studies completed its first Consider Litter Action where students collected, sorted, and analyzed litter that affected our neighborhood.







Central High School beta students placed in the Louisiana State Beta Convention for engineering which qualifies them for nationals!

Regional News Manual Region 3 Manual

Sixth grade students in the Terrebonne Parish School District participated in a field trip to the Wetlands Acadian Cultural Center December 6-7 in Thibodaux. Partnering with Louisiana Sea Grant, students attended the Cultural Center where they visited the museum, learned about soil core samples, water density/climate and most exciting, learned about water quality while aboard a pontoon boat in Bayou Lafourche!





H. L. Bourgeois' Chemistry students hosed the Nicholls Chem Roadshow last month. Students were excited as they explored various scientific phenomena.







Regional News MININ Region 3 MININ

In celebration of Computer Science Education Week, Bayou STEM hosted a LEGO Robotics and Coding Day Camp for 2nd-8th graders and an FRC Robotics Team Recruiting Event for 9th-12th graders. It was great to see the creativity displayed by the students and the interaction with their parents as they learned. Students interested in joining the Bayou STEM FRC Robotics Team can contact Bayou STEM at (985)448-7964.



Regional News MMMM Region 3 MMMMM

Students at the St. John the Baptist Parish Magnet Program participated in the Need Project's energy house project. The project requires students learn about efficiency, conservation, and diminishing returns as they insulate a house and test its efficiency.





Congratulations to St. John the Baptist Parish's STEM program! They have showed continuous growth with their program increasing their score from a 90.1 (A) to a 95 (A). Congratulations to the scholars on their exceptional work and to the dedicated faculty, staff, and administration of the district's program!



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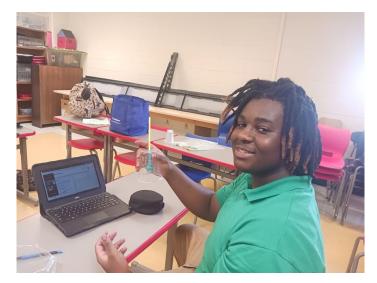
Assumption Parish Head Start partnered with Region 3 LA Dept of Health to provide hand hygiene lessons. Mrs. Leslie's class at Belle Rose primary had a great time dancing while learning about good health practices!





At the recent meeting of the Southern Marine Educators Association (Same) a group of Louisiana educators gathered to pose with Alma R Jackson. Alma is the incoming President of SAME. The annual conference included the business meeting, a Share-a-thon, planning for the 3025 NMEA Conference in Lafayette and outdoor activities. This year's event was held at Gulf State Park.

St. John the Baptist Parish Public Schools' STEM Magnet Program in the Ochsner RN Apprenticeship Pathway recently learned about and experimented with lungs and their function for our bodies.





Regional News MININ Region 3 MININI

Bayou STEM's FIRST Robotics Competition Team participated in their first FRC launch event! Many thanks to Grow Collaboration, parents, and volunteers for making the the trip to NASA's John C. Stennis Space Center possible. The team is looking forward to the Crescendo build!







The Nicholls Chemistry Roadshow, in partnership with Bayou STEM, visited the physics classes at St. Charles Catholic High School. The students enjoyed exploring chemistry and physics phenomena.



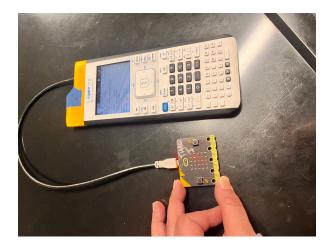
Regional News MMMMM Region 4 MMMMM

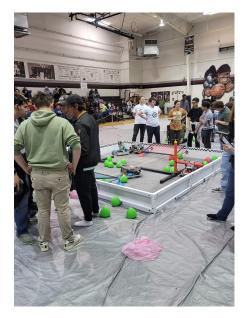
The fifth grade garden ambassadors of Ernest Gallet Elementary School in Youngsville had a bountiful harvest this fall. The students will use the vegetables and fruits from their school garden to prepare a meal in the annual Cuisine de Jardin Cookoff on February 3.





At Southside High School in Youngsville, LA, Mrs. Stacy Thibodeaux uses all means necessary to teach mathematical models. Here she is using BBC Micro:bits and TI Nspire CX II Python programming with her students. For more information contact her at svthibodeaux@gmail.com, or https://education.ti.com/en/product-resource s/microbit





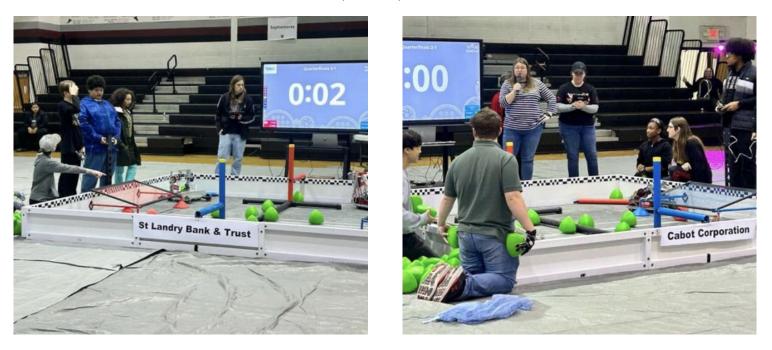
On Satuday, January 13, 2024, the Region 4 STEM Network Center hosted a Vex Robotics Competition at Northwest High School. The competition was ran by the local highschool's robotics program, Northwest High Robotics. The competition hosted 20 teams from across South Louisiana competing in the Vex Robotics Game 'Over Under'.

Regional News MMMMM Region 5 MMMMM

Mrs. Turner's tech classes participated in the District Minecraft Challenge. The challenge was to build something that would add to the Downtown Lake Charles area.



Our Robotics teams are on fire! The Northside Engineers from Washington Marion and Coleman Youth Development Academy are representing Calcasieu Parish at the VRC Competitions. Today, they're competing at the LSU Alexandria VRC Tournament. Let's cheer them on as they aim for the state championship!



Robot-Gras was a HUGE success! All of the teams did a phenomenal job. It was awesome to see them in action! Congratulations to all of our winners!!! Next up Louisiana State Elementary IQ Championship competition for our 4th and 5th grade qualifying teams!



Empowering the next generation of female leaders! Excited to share RoyOMartin's Girls Can Too mentoring program—a transformative initiative fostering confidence, self-esteem, and knowledge in the numerous possibilities available to them. Together, let's inspire and support these young minds to believe in their amazing potential!





Jenni McGee, a second-grade educator at Pine Grove Elementary School in Caddo Parish, delved into the exploration of landforms with her students. Using air clay, her students crafted various landforms on an island, bringing them to life with vibrant paints.





Champions emerged from Bossier Parish Schools, Caddo Parish Schools, and Caldwell Parish Schools at the 2023 FIRST LEGO League (FLL)! These victorious teams are set to progress to the Louisiana FLL State Championship in New Orleans, proudly representing North Louisiana in the statewide competition. A heartfelt congratulations to the talented students and their dedicated mentors!



LOUISIANA SCIENCE TEACHERS ASSOCIATION NEWSLETTER

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Collaborative

Project

The SCILS Region 8 LASTEM team kicked off the new year by re-launching the Louisiana Girls Collaborative Project. This state-wide effort is designed to provide resources and opportunities that further engage girls in STEM. Monthly newsletters will be provided to each region across the state with special events slated for the future.

SCILS was also proud to host IGNITE Training on the Louisiana Tech University campus as part of its partnership with Region 2 at LSU. The free workshop focused on fundamentals of computational thinking and computer science for Louisiana's K–5 teachers in public and public charter schools









The robotics teams from Ruston High School and West Monroe High School were on site at Louisiana Tech University for the launch of the 2024 FIRST Robotics Season. Under the direction of Dr. Heath Tims (Louisiana Tech University College of Engineering and Science) and assisted by Dr. Lindsey Keith Vincent (Louisiana Tech University College of Education and Human Sciences), the teams joined others along the I-20 Corridor in Tech's Integrated Engineering and Science Building to hear special presentations from different leaders as well as Ivy League schools as they begin preparations for the 2024 season. Both teams are now preparing for the district and regional competitions as well as a chance to win a spot in the FIRST Robotics Competition Championship later this spring.









Melissa Le (Ruston High School student, SCILS Ambassador, member of the National Girls Collaborative Project Youth Advisory Board and reigning Miss Louisiana Watermelon Festival Teen) provided a program for elementary students at A. E. Phillips Laboratory where she shared her platform about the importance of STEM in today's world. The SCILS team prepared special take-home activity cards for her to share with each student.



LOUISIANA SCIENCE TEACHERS ASSOCIATION NEWSLETTER

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Downsville Community Charter School, Monroe's Martin Luther King Jr. Junior High School, and Cedar Creek School in Ruston helped SCILS launch the first week of CS4U (Computer Science for You) for the new year. Under the direction of Missy Wooley (Louisiana Tech University) and with the help of Chris Campbell (UTeach Tech) and his students, the middle graders engaged in the full-day program focused on coding, computer science, cybersecurity and career success. Chris also helmed the Louisiana Tech Science Olympiad Tournament with stakeholders from across the Tech campus assisting with the various competitions. Teams from A. E. Phillips and Cedar Creek were among those competing.

The SCILS team also hosted the Math Regional Refresh Tour facilitated by the Louisiana Department of Education Math Team. This professional learning event brought together system leaders, school leaders and teachers from along the I-20 corridor to learn about new initiatives, resources and opportunities in K12 math education while focusing on coherent instructional systems, new fluency resources and new required training for math teachers.







