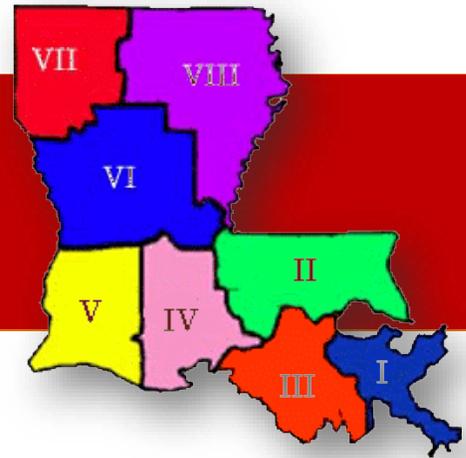


LSTA
NEWSLETTER

LASER



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LOUISIANA SCIENCE TEACHERS ASSOCIATION

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



August 2019 | Louisiana Science
Teachers Association

LSTA Board and Regional Representatives

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<p>Casey McMann Region 1 Representative cmcmann@ppsb.org</p>	<p>Bianca Deliberto Region 2 Representative bianca.deliberto@zacharyschools.org</p>	<p>Tammy Brouillette Region 3 Representative tammybrouillette@tpsd.org</p>
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LOUISIANA SCIENCE TEACHERS ASSOCIATION

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



President's Message from Patrice Mire

Hello Everyone!



I hope this warm (HOT!) weather finds everyone taking time to relax and enjoy time with family and friends before this next school year begins. This summer has been very busy for your LSTA Board.

The LSTA board members attended a summer retreat on June 21st and 22nd in Baton Rouge. During the retreat, your regional representatives prepared for the redelivery of a summer round of regional workshops entitled *Phenomena: The Enigma of Science Education*. These workshops were designed to inform teachers of the use of example phenomenon to develop a Driving Question Board and understand questioning as an effective strategy to drive instruction. July 15 – 17, I was extremely honored to represent LSTA as a voting delegate to the 2019 National Congress on Science Education in Washington, D. C. I was joined by LSTA Secretary **Shauna LeBlanc** who served as the Louisiana Association of Science Leaders (LASL) voting delegate. During Congress, Shauna and I had the opportunity to network with other science

leaders from the US and Canada; attend leadership workshops and focus groups to address national issues; and work with the NSTA elected leaders and staff. Shauna and I had the opportunity to travel to Capitol Hill to meet with staff members from the offices of Senator Bill Cassidy and Senator John Kennedy. I also had the pleasure to meet with Congressman Clay Higgins. During these visits, we discussed the importance of science education in today's world and the importance of continued funding for Title II and Title IV. Then, on July 29 – 30 Past-President **Nathan Cotten**, LSTA member **Esperanza Zenon** and I traveled to Washington, D. C. to assist the staff of NSTA in planning for the 2020 NSTA area conference that will be coming to New Orleans. During this planning meeting, we developed the overall theme and the three strands for the conference. As soon as these get the final approval from NSTA, we will begin sharing this information with you.

As a reminder, [2019 QSM Proposals](#) will be **due September 15, 2019**. If you need assistance in writing your grant, please visit the LSTA website for several resources including a template that can be completed and then copied into the online document. Other resources that you may need can be located at <http://lsta.info/grants/>.

Please do not forget to volunteer and register for the 2019 Joint LATM/LSTA Conference to be held at the Raising Cane's Conference Center in Baton Rouge on November 4 – 5! All of the information that you need to register for the conference, submit proposals for concurrent sessions, or become an exhibitor can be located on the [official conference page!](#) Deadlines are quickly approaching!!

Do you want to become more involved in science education in Louisiana? Do you enjoy sharing your expertise with others? Are you ready to take a step into a leadership role? Then LSTA needs you! Please consider nominating someone one know or consider turning in an application yourself. **Saturday, August 24, 2019** is the deadline to turn in all applications to Nathan Cotten at nathancotten@tpsd.org!

I sincerely hope you had a very relaxing summer and your school year starts off without a hitch. I hope to see everyone in Baton Rouge in November for the 2019 Joint LATM/LSTA Conference! Don't forget to [register!](#)!!

Yours in SCIENCE EDUCATION,



LATM/LSTA Math and Science Conference



LATM and LSTA presents

STEMulate Your Mind

November 4th and 5th 2019
Baton Rouge, La
Raising Cane's River Center

For more information, visit our websites:
www.lamath.org www.lsta.info

LSTA Awards and Travel Grant Applications

**LSTA Awards and Travel Grant Applications
are now being accepted**

www.lsta.info

Deadline for submission is September 27, 2019

Questions can be emailed to Jan Graff
jlgraff@bellsouth.net

LATM/LSTA Math and Science Conference Sponsors

LATM and LSTA would like to thank McGraw Hill, Carolina Biological Supply, Louisiana Art & Science Museum, and Visit Baton Rouge for their conference sponsorship. For more information about how you can support our math and science teachers by becoming a conference sponsor, please contact [Patrice Mire](#) or [Tricia Fos](#).



Quality Science and Math Grants



QSM

Quality Science and Math Request for Applications

*Do you have a concept you would like
to teach, but don't have the
materials?*

HELP is on the way!

Who qualifies: Only full-time classroom teachers assigned to
teach math or science in K-12 regular education programs in
public schools are eligible.

Submit an application—it's EASY!

HOT TIPS

You have until September 15 to determine what you would like to request, write, and submit your application! Start EARLY! Be sure to answer each criteria requested, fully describe what you want to do, and justify your expenditures for your proposed project. Ask a friend/colleague to read your proposal before you submit it to provide helpful feedback.

The submission deadline is midnight Sept. 15, 2019!

**The award amount is up to \$1,000 for
NON-Consumable instructional materials!**

Go to the QSM link below and begin your online application. Check out the requirements and number of words allowed per section. Copy/Paste the questions and information you write on your computer so you have your own copy of your proposal with your description, budget, and materials. What happens if you have to stop in the middle of writing the proposal? No problem! You can work on it a little at a time and enter the site frequently. Go to <https://app.reviewr.com/s1/site//QSMGrantProgram%202019> to develop a proposal that will help you teach important concepts!

Questions?
Contact Brenda Nixon . bnixon@lsu.edu . 225-205-2680

Wishing you only the BEST!

LSTA Needs You!

Call for Nominations for LSTA Board Positions

Do you want to become more involved in science education in Louisiana? Do you enjoy sharing your expertise with others? Are you ready to take a step into a leadership role? The Louisiana Science Teachers Association (LSTA) needs you!

Nominations are now open for the next two-year term of office, November 2019-December 2021, for the following positions:

- President
- Vice-President
- Secretary
- Region 1 Representative
- Region 2 Representative
- Region 3 Representative
- Region 4 Representative
- Region 5 Representative
- Region 6 Representative
- Region 7 Representative
- Region 8 Representative
-

The LSTA Board typically meets four times each year either face-to-face or electronically. Duties of officers and regional representatives include attending board meetings, participating in various board projects including regional workshops, nominating and supporting colleagues for awards, and working at the annual conference. Regional representatives have the opportunity to serve their regions by informing members about opportunities in science education, sharing local science news for publication in each issue of the LASER, and facilitating regional workshops. Persons applying for the office of LSTA President are required to have previous Board experience.

Nomination packets should include the following:

- letter with a statement from the nominee accepting the nomination, the reason the nominee is interested in serving as an LSTA officer, what experience and knowledge the nominee would bring to the office, and how the nominee envisions the role of LSTA in science education;
- resume which includes but is not limited to teaching experience and current position; and
- maximum of three letters of support (not to exceed one page each);
- President, Vice President, Secretary positions only:
 - brief bio (100 words or less) explaining how they can benefit science educators as a leader of LSTA
 - Photograph is preferred

Nomination packets should be sent to:

Terrebonne Parish School Board

Attn: Nathan Cotten

P.O. Box 5097

Houma, LA 70361

Electronic copies should be sent to: nathancotten@tpsd.org.

All nomination packets must be postmarked on or before Saturday, August 24, 2019.

All electronic packets must be received by midnight Saturday, August 24, 2019.

Nominees will receive acknowledgment of receipt of their nomination. The nominating committee, chaired by LSTA Past-President, Nathan Cotten, will select two nominees per office for the final ballot. Ballots will be distributed to active LSTA members in September. Election results will be announced at the 2019 LSTA Awards Event in Baton Rouge and officers will immediately assume their positions.

Regional News

✦ Region I ✦

Rob Wallace and **Casey McMann** facilitated a regional workshop aimed at helping teachers use example phenomena to develop driving question boards, as well as how to start evaluating and developing their own anchor phenomena. Teachers met on July 30 at the World War II Museum and shared their experiences and knowledge.



On June 5th, the annual Mississippi River Delta Institute (MRDI) took place in St. Bernard Parish when Hamline University's Center For Global Environmental Education (CGEE) and local educators **Blaize Pezold** from the Meraux Foundation and **Dinah Maygarden** from UNO's Pontchartrain Institute for Environmental Sciences presented a four day, field-based professional development opportunity to inspire, educate and prepare teachers to engage students in STEM disciplines through experiential, inquiry-based investigations at local watersheds.

Activities included:

- Exploring the Mississippi River and estuaries by boat, offering unique vantage points of water;
- Articulating field investigations through accurate, scientific observation;
- Creating, utilizing and learning new strategies using science notebooks;
- Participating in learning activities utilizing Waters To The Sea®, multimedia learning tools, as well as other classroom resources & tools;
- Inquiry-based investigations of riverine and marsh habitats, delta geology, coastal engineering, and urban water management.
- Strategy sharing for helping students 'think like a scientist,' 'design like an engineer,' and 'write like an author.'
- Creating plans to implement science, inquiry, and literacy investigations into their classrooms.





The Science Teacher Technology Training (ST³) workshop held at Delgado focused on teachers learning and practicing microscopy strategies to bring back to their classrooms. Participants took home a science kit equipped with a portable microscope for each student in their classroom for the 2019-2020 academic year, along with supplemental materials such as slides, field collecting kits and curriculum.



ST³ is under **Dr. Amanda Rosenzweig**, program director. The goal of the ST³ is to help teachers become more comfortable with science content and the use of scientific hardware by providing support and training in the proper use of science equipment.

*Pictured at the June 17 workshop, from left: **Amel Ramzi** (Muslim Academy), **Monique Breaux** (Audubon Charter), **Monique Commodore** (Westminster Elementary), **Sue Schott** (St. Catherine of Sienna), **Joni Simmons** (South Grant Elementary), **Amany Ramzi** (Muslim Academy). Not pictured: **Tasha Foster** (Audubon Charter).*

Please submit news for Region 1 to **Casey McMann** at cmcmann@ppsb.org.

✦ Region II ✦

“Special Saturdays” at the **LSU Museum of Natural Science** are STEM programs that focus on introducing children and their parents to the world of natural science. One Saturday a month they focus on a specific topic and invite experts from within the LSU research community to give short engaging talks accompanied by hands-on activities. All programs are FREE and are especially appropriate for children ages 5-12. Sessions are held in the exhibit area of the LSU Museum of Natural Science (Foster Hall) from 10:00am-12:00pm. Upcoming sessions include Ice Sheet Retreat (September 7) and All About Penguins (October 19). Email museum@lsu.edu with your Name, Email, Participant’s name(s) & age(s) and the Dates you want to reserve and we will put you on the list.

Ever wonder what lies behind closed doors at the LSU Museum of Natural Science? **“Night at the Museum”** will give you a glimpse into the specimen collections and cutting edge research happening at the **LSU Museum of Natural Science**. “Night at the Museum” is a FREE public event and everyone is welcome to attend. Each “night” we will focus on a specific LSUMNS research collection (i.e. birds, mammals, fish, etc). Scientists working with that collection will give short engaging talks about their research and then take guests on a behind the scenes tour* of their focus collection. You will also have the opportunity to view specimens up close and meet graduate & undergraduate students working at the museum. Programs will occur 2-3 times a semester on a Thursday from 6-7:30pm (Doors open at 5:30pm). They will be held in the exhibit area of the LSU Museum of Natural Science (Foster Hall) unless otherwise specified. Light refreshments will be served. Programs will start in September. Be sure to check the [website](#) for the 2019-2020 schedule.

On July 20, the day Neil Armstrong touched the surface of the Moon in 1969, the **Louisiana Art and Science Museum** welcomed tomorrow’s astronauts, engineers, programmers, and physicists to a special day full of hands-on activities, a

Louisiana Science Teachers Association Newsletter (www.lsta.info)

display of artifacts related to the Moon landing, and planetarium shows. In total, the Museum enjoyed the company of 425 visitors of all ages for the occasion! The main attractions of the day were a display of authentic lunar samples handled by **Linda Gauthier**, a NASA Solar System Ambassador and an educator at **LASM**, and showings of **Apollo 11: First Steps Edition**, a new planetarium show that includes never-before-seen footage and audio recordings of the Apollo 11 Mission.



Please submit news to your region 2 representative, **Bianca Deliberto** at bianca.deliberto@zacharyschools.org.

✦ Region III ✦



Congratulations to **Wendy Delgado**, 7th and 9th grade science teacher at Houma Christian School, for being named a finalist for the 2019 Bob Thompson Excellence in Energy Education Award. Wendy attended the 2019 NEED (National Energy Education Development Project) Energy Conference for Educators in Galveston, Texas. The five-day conference involved interactive activities related all aspects of energy including the science of energy, sources of energy, transportation, electricity, efficiency and environmental/economic impacts. As part of her training, she received the materials to implement energy units in their classrooms, multi-disciplinary teams, and after school -programs. Wendy was also awarded \$350.00 toward the purchase of a NEED kit of her choice.



The Vanderbilt Catholic High School STEM Club, sponsored by **Ann Robichaux**, hosted a STEM Camp for students in grades 4-7 in early June. Participants investigated topics in chemistry, physics, engineering, and earth science.

Tammy Brouillette, Jeremy Ezelle, Ann Robichaux, Karrie Dryden, Raquel Dupre, and Sarah Jimenez attended Materials Camp at the University of New Orleans. During the week-long camp which was sponsored by the National Association of Corrosive Engineers (NACE), participants conducted experiments involving metals, glass, ceramics, polymers, and composites.



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West St. John High School teachers **Kristen White**, from left, and **Rochelle Darville** were recently recognized by Shell Louisiana/Alabama Manufacturing External Relations Manager Rochelle Touchard for winning the National Science Teachers Association's Shell Science Lab Regional Challenge. As the winner of the challenge, Darville will receive a lab makeover support package valued at \$15,000 for her school. The challenge recognizes exceptional and innovative science educators in K–12 school programs for their exemplary approaches to science lab instruction utilizing limited school and laboratory resources and raises awareness and exposure of the outstanding work being done in the science education field in areas near Shell assets.

Please submit news for Region 3 to **Tammy Brouillette** at tammybrouillette@tpsd.org.

✦ **Region IV** ✦

The University of Louisiana at Lafayette's Upward Bound Programs hosted Rocket Day on July 16th to celebrate the 50th anniversary of NASA's Apollo mission to the moon. Program participants also learned basic principles of Newton's Law of Motion and also the three basic components to launch a NASA rocket—heat, fuel, and oxygen. These high school participants hail from target schools across the Acadiana region: St. Mary, Iberia, St. Martin, Acadia, Vermilion, Lafayette, and St. Landry parishes. We hope many will contemplate a career in a STEM field that will support future NASA missions.



Please submit news for Region 4 to **Breyone Carter** at bscarter@lpssonline.com.

✦ **Region V** ✦

Mrs. Reeves, Mrs. Fontenot, Julia, Dylan, Milo, and their parents took a trip to Washington D.C. to attend the NEED (National Energy Education Development) project awards ceremony. St. Margaret was named 2019 Louisiana School of the Year! Way to go Vikings!



CPSB Summer Tech Camp wows students with Virtual Reality, Sphero, Ozobots, and coding.

Darrell McDaniel, Tracy Pearce, Nick Limberis, and Gary Kratzer launch year 2 the second cohort of teachers joining the NOAA B-Wet grant, "Wetland Restoration Through Aquaponics.: Eight new teachers join in this year; four high school and four middle school.



Please submit news for Region 5 to **Darrell McDaniel** at darrell.mcdaniel@cpsb.org.

✦ Region VI ✦



On July 27, teachers from across region six gathered to learn how to better implement phenomena based learning in the classroom. This LSTA workshop, which took place at the Rapides Foundation Building, allowed teachers to experience phenomena. Teachers were also able to identify meaningful phenomena that could be used in the classroom.

Field trips are a great opportunity for students to gain new experiences. Recently, the students at one junior high had the opportunity to learn through a unique field trip. Caroline Dormon Junior High 7th and 8th graders participated in a Coastal Conservation Science Program in Costa Rica during spring break. Throughout the week, students explored endemic wildlife, cetacean migrations, marine fauna, jungle rivers, endangered species, and mangroves. They were also a part of a volunteering project at Wildlife Refuge in Manuel Antonio, Costa Rica where they engaged in research and development in helping protect local species in danger of extinction.



Alexandria Zoo is a fun, interactive outdoor classroom and their staff is ready to help make your school field trip an experience to remember.

There are many great resources available for teachers on our website, www.thealexandriazoo.com. When planning your trip, review the “Know Before You Go” packet for information regarding field trip admission and fees, train rides, parking, lunches, zoo rules and more. Educator guides to aid in planning your visit, printable activities to encourage your students to investigate and discover as they explore the Zoo, and sample permission slips and chaperone packets are also available for download.

Teachers can also reinforce standards-based concepts being explored in your curriculum by scheduling a free education program. These programs are customized to adhere to Louisiana’s state-mandated standards of learning and allow your students to experience our animal ambassadors up-close.

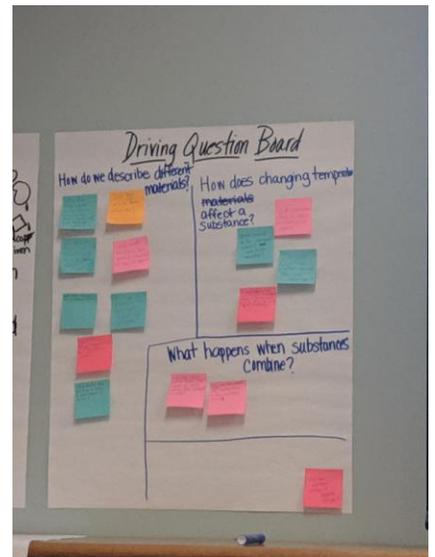
With cooling temperatures and smaller crowds, autumn is a great time of year to treat your students to an amazing outdoor adventure at Alexandria Zoo!

If you are doing something awesome in your classroom or have news to tell the teachers of Region Six, please let us know by emailing Pierre LaCaze at pierre.lacaze@rpsb.us. Have a terrific school year!

Please submit news for Region 6 to **Pierre LaCaze** at pierre.lacaze@rpsb.us.

✦ Region VII ✦

In July, over 150 third-fifth grade Caddo science teachers and leaders attended a two-day professional learning institute on the high-quality curriculum from Great Minds, PhD Science. Educators engaged in three-dimensional learning and explored exciting phenomena as they unpacked the new science curriculum.



On Monday, July 22, Caddo teachers attended a workshop about invention, literacy, making, and design thinking using the Makey Makey invention kit. Using alligator clips and all kinds of conductive material, teachers turned everyday objects into system controllers using the Makey Makey and Scratch.



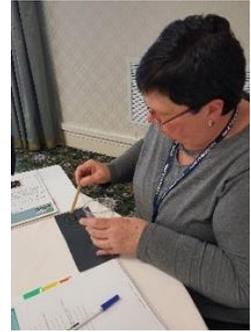
On July 27th, teachers came together at the Bossier Instructional Center to learn how to use phenomenon and develop a driving question board. Provided by LSTA, the workshop focused on how phenomena can be introduced at the start of a unit to drive 3 dimensional learning. Thanks to those from Region 7 who were able to attend.



Please submit news for Region 7 to **Jeff Holcomb** at jeffreygholcomb@gmail.com.

✦ Region VIII ✦

Cathi Cox-Boniol and **Missy Wooley** (both Lincoln Parish Schools) traveled to Katy, Texas, for a visit to the Maker Camp at Tays Junior High School as well as the Shaw STEAM Center as they continued planning for programming in the new Lincoln Parish STEM Center set to open this fall.



Cathi then traveled to Washington DC for a training conference as part of the 2019-20 cohort of Essential Elements Trainers for the Chemical Educational Foundation.



Chris Campbell and **Diane Madden** (both Louisiana Tech University) attended OpenSciEd training in Austin, Texas, in preparation for training teachers on the new 7th grade units while Cathi and Missy traveled to Baton Rouge for a week of training with the new OpenSciEd units recently released for 6th grades.

Both then attended the Teacher Leader Summit in New Orleans where they sat on an OpenSciEd panel for the Department of Education before presenting two sessions designed for reflection on OpenSciEd implementation. They then joined Chris, Diane, and **Garrah Leshe** (Ouachita Parish Schools) in facilitating OpenSciEd training for the MSP Project offered to teachers from Lincoln, Monroe City, and Ouachita parishes.



Cathi and Missy then attended the NSTA STEM Forum & Expo held in San Francisco, California.



Please submit news to your region 8 representative,
Laura Malone at lauramalone@opsb.net

Professional Development Opportunities and Resources

Science Leaders' Corner

Louisiana Association of Science Leaders (LASL)



LASL is pleased to announce that **Page Keeley**, NSTA President 2008-09 and leading NSTA author, will present a leadership extended session at the 2019 Joint Math Science Conference in Baton Rouge on **Monday, November 4th** for leaders in science education. Mark your calendar and conference schedule now.

Building School and District Capacity for Science Formative Assessment
This short course will address how science coordinators and teacher leaders can support others in implementing science formative assessment probes and classroom techniques that help teachers understand what their students are thinking and use the information to make better instructional decisions.

The short course will focus on:

- 1) the research that supports formative assessment;
- 2) formative assessment resources, tools, and techniques for science,
- 3) connections to the current vision for science education that is reshaping and shifting instruction; and
- 4) key message for leaders to engage others and embed formative assessment in teachers' practice throughout their schools and districts.

Are you a district science supervisor, science content specialist, school master teacher, Teacher Leader or science coach? If so consider becoming a member of LASL.

Based on the Frameworks for K-12 Science Education and the LSSS the way science educators approach the teaching and learning process and the use of tools and resources to improve science teaching and learning has shifted.

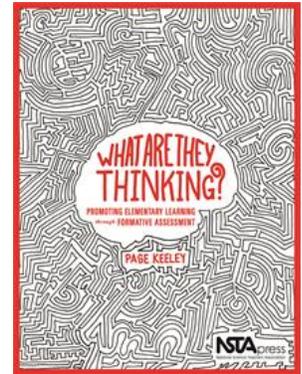
To receive more information on the association contact **Julie' DuBois** at judubois@iberia.k12.la.us.

Resources for science leaders:

Changing the Game in STEM with Family Engagement: A White Paper for Practitioners and Field Leaders to Empower Families in STEM a new white paper from the STEM Next Opportunity Fund explores the importance of family engagement for raising youth's awareness of the value of STEM and in brokering their participation in activities that build STEM competencies. It identifies five promising practices for encouraging family engagement and highlights case studies of organizations currently working to put those practices into action. Promising practices highlighted in the white paper include family relationship building, parent empowerment, access and inclusion, professional development, and impact evaluation. <https://stemnext.org/changing-the-game-in-stem-with-family-engagement/>

The National Academies Press has a number of books and resources available for FREE download to assist with 3-dimensional learning and the LSSS. Search using www.nap.edu/search/?term=NGSS Critical to understanding 3-dimensional learning and the LSSS is the Framework which is also available for FREE download from the National Academies Press <https://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts>

The most recent NAP publication related to the new science standards is [Science and Engineering for Grades 6-12: Investigation and Design at the Center](#) (2019). From the Preface:



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Students learn by doing. Science investigation and engineering design provide an opportunity for students to do. When students engage in science investigation and engineering design, they are able to engage deeply with phenomena as they ask questions, collect and analyze data, generate and utilize evidence, and develop models to support explanations and solutions. Research studies demonstrate that deeper engagement leads to stronger conceptual understandings of science content than what is demonstrated through more traditional, memorization-intensive approaches. Investigations provide the evidence that students need to construct explanations for the causes of phenomena.

Louisiana Art & Science Museum

LASM Announces Partnership With CPRA, New Free Program for Eighth-Graders



The Louisiana Art & Science Museum has partnered with the Coastal Protection and Restoration Authority to create **The River Dynamic Experience**. This exciting new program includes a visit to the LSU Center for River Studies and same-day, hands-on classes and programs at the Museum. On their tour of the CRS, students will explore a 3-dimensional model of the lower 190 miles of the Mississippi River, one of the most technologically-advanced models in existence. At the Museum, students will collaboratively design solutions to real-world environmental challenges by engaging with a state-of-the-art stream table. Participants will also view a related large-screen educational movie at the Museum. Activities are aligned with the Louisiana Student Standards for Science.

Through this partnership with the **Coastal Protection and Restoration Authority**, this learning opportunity is available free-of-charge to 8th-grade students on a first-come, first-served basis. Please email reservations@lasm.org to register as soon as possible!

LASM Releases 2019-2020 Adventure Planner



The Louisiana Art & Science Museum is excited to announce the release of its 2019-2020 *Adventure Planner*! Available online at lasm.org/ap, the *Adventure Planner* is an educator's guide to LASM's school group programming. In its pages are lists of classes, shows, and other programs with their prices, appropriate grade levels, and suggested pairings.

Your students will love our **NEW interdisciplinary classes and planetarium shows**, which include *Apollo 11: First Steps Edition*; *Dinosaurs: Giants of Patagonia*; *Cosmic Colors: An Adventure Along the Spectrum*; *Marbles, Motion, & Magnets*; *The Art of Astronomy*; and *The River Dynamics Experience*.

Booking is available online, by fax, or by mail. Questions? Email reservations@lasm.org or call 225.344.5272 ext. 142.

Framework for Leading NGSS Implementation

An excellent resource for districts, is available at

<https://www.wested.org/wp-content/uploads/2017/10/Framework-for-Leading-NGSS-Implementation.pdf>

Free NGSS-Designed Curriculum Available!

[SCALE Science Website is Live](#)

Teacher Institute for Evolutionary Science (TIES)

The purpose of the Teacher Institute for Evolutionary Science (TIES) is to familiarize interested science teachers with the concepts of natural selection, common ancestry, and diversity in order for them to confidently cover the topics in their classrooms and fulfill their curriculum requirements. TIES introduces teachers to the most important points of evolution and natural selection with a focus on the amazing advances of genetics. The success of TIES depends upon providing ready-to-use resources that teachers can begin to use immediately. Participating teachers or student teachers leave our workshops with presentation slides, labs, guided reading assignments, an exam, and a valuable resource list for their lesson plans.

TIES is funded by the Richard Dawkins Foundation for Reason and Science which is a subsidiary of the Center for Inquiry. School Districts wanting to in-service or provide professional development for their teachers can contact me to set up a workshop. The full workshop usually runs about 3 hours and includes content knowledge presentation on genetics and evolution, lab simulation and explanations and a walk through of the web page where they can access lots of free, high quality information, presentations, tests, labs, and activities. Here is a link to the website for your perusal: <https://richarddawkins.net/ties/>

If you are interested in becoming a member of this amazing Professional Learning Community as a teacher or scientist, please take a minute to sign up on the website. If you don't want to participate, you can still feel free to take what resources you want and use them in your classroom. Everything that we have is FREE!

You can also follow us on Facebook @RDFRSTIES and Twitter @rdfrsTIES. The links are also on our website.

LSU's Chem Demo Program

The link below is about LSU's Chem Demo Program a science roadshow run by LSU

<https://cen.acs.org/articles/96/i17/Louisiana-State-Universitys-ChemDemo-program.html>

New Item Sets added to EAGLE

New item sets have been added to the EAGLE Passage and Item Information section of the appendix of [A Teacher's Guide to LEAP 360](#). As new content is added to EAGLE throughout the school year, it will be announced through the Teacher Leader newsletter and added to the Teacher's Guide to LEAP 360 Appendix.

Please visit the [LEAP 360](#) page to find out more information about creating tests, adding classes, etc. in Eagle

Assessment Literacy Modules

Here is a newly developed assessment literacy digital workbook that some may be interested in taking a look at...

<http://www.scillsspartners.org/scillss-resources/>

One needs to scroll about 3/4 the way down the page to find...

Digital Workbook on Educational Assessment Design and Evaluation: Creating and Evaluating Effective Educational Assessments

Chapter 1: Purposes and Uses of Assessment Scores, Validity, Validity Questions ([Adobe Connect Digital Workbook](#), [PPT](#), [Script](#), [MP3](#))

- Chapter 1.1 Assessment Purposes and Uses
- Chapter 1.2 Validity as the Key Principle of Assessment Quality
- Chapter 1.3 Four Validity Questions to Guide Assessment Development and Evaluation
- Chapter 1.4 Summary and Next Steps

Chapter 2: Construct Coherence ([Adobe Connect Digital Workbook](#), [PPT](#), [Script](#), [MP3](#))

- Chapter 2.1 Review of Key Concepts from Chapter 1
- Chapter 2.2 The Concept of Construct Coherence

Chapter 3: Comparability ([Adobe Connect Digital Workbook](#), [PPT](#), [Script](#), [MP3](#))

- Chapter 3.1 Review of Key Concepts from Chapters 1 and 2
- Chapter 3.2 What is Comparability and Why is it Important?
- Chapter 3.3 What is Reliability/Precision and Why is it Important?
- Chapter 3.4 Validity Questions Related to Comparability and Reliability/Precision

National Geographic Online Educator Certification

Registration for the online Educator Certification program is live. [Click here to sign up for the fall cohort](#). Participants will complete all three phases of Educator Certification online.



LATM and LSTA presents

STEMulate Your Mind

November 4th and 5th 2019
Baton Rouge, La
Raising Cane's River Center

For more information, visit our websites:
www.lamath.org www.lsta.info

The Satellites and Weather Teaching Box

This collection of educational resources is designed to help middle school students learn how satellites “see” the atmosphere and how they help with weather forecasting. Resources in the [teaching box](#) are sequenced to help build student understanding, align with Next Generation Science Standards, and have been reviewed by our team of educators. The [Satellites and Weather Teaching Box](#) is made possible thanks to support from [COSMIC](#) and [NOAA](#).

[UCAR Teaching Boxes](#) are collections of classroom-ready and standards-aligned activities, content, and multimedia that build student understanding of science, technology, engineering, and math. All materials are freely available online.

NEW: Screening Tools for 3D Science Assessment Tasks



As the science education community focuses on how to assess student learning under new science standards, the question of how to determine the quality of potential assessment tasks arises time and again. Today, Achieve is excited to release [two new tools](#) intended to assist educators in evaluating science assessment tasks to determine whether they are designed for three-dimensional science standards based on the *Framework for K-12 Science Education*, such as the Next Generation Science Standards.

The [Science Task Prescreen](#) is used to conduct a quick review of assessment tasks to identify any “red flags” - challenges commonly found in science assessment tasks - and determine whether a task is worth a more rigorous evaluation.



The [Science Task Screener](#) is used to take a deeper dive into evaluating science assessment tasks. The Screener is organized around four key criteria, each with a set of indicators to help reviewers determine whether the criteria are met and a set of response forms for gathering and analyzing evidence, providing suggestions for improvement, and rating the task. The Screener builds off the criteria in the [EQuIP Rubric for Science](#) by more clearly specifying features for the assessment tasks embedded in lessons and units.

If you have questions or are interested in professional development opportunities related to evaluating science assessment tasks, please contact ngss@achieve.org. You can also learn more about the broader science professional learning services that Achieve offers, including support for science tasks, [here](#).



Miami University's Project Dragonfly

Miami University's Project Dragonfly is accepting applications for 2019 Earth Expeditions graduate courses that offer extraordinary experiences in 16 countries throughout the world. <http://EarthExpeditions.MiamiOH.edu>

Earth Expeditions can build toward the Global Field Program (GFP), a master's degree that combines summer field courses worldwide with web learning communities so that students can complete the GFP master's part-time from anywhere in the United States or abroad. <http://GFP.MiamiOH.edu>

Project Dragonfly also offers the Advanced Inquiry Program (AIP) master's degree that combines web instruction from Miami University with experiential learning and field study through several AIP Master Institutions in the U.S. Applications for Miami's 2019 cohorts are being accepted now with place-based experiences provided at zoos in Chicago, Cincinnati, Cleveland, Denver, New York, San Diego, Seattle, and our newest affiliate learning institution, St. Louis. <http://AIP.MiamiOH.edu>

Graduate tuition for all programs is greatly reduced because of support from Miami University.

Weather Ready Nation

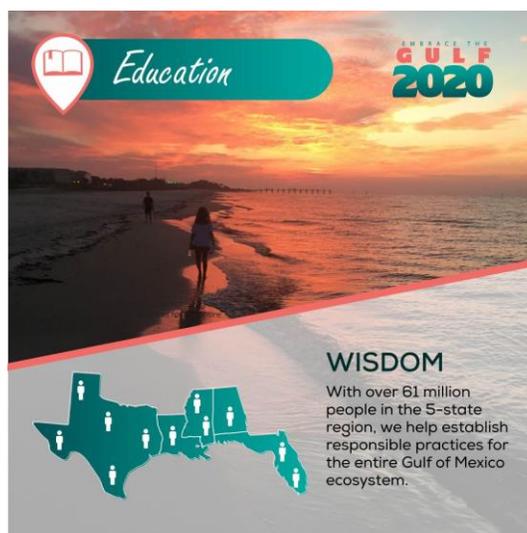
The National Weather Service (NWS) has always been a wealth of information and resources for educators and those interested in learning about weather! As you prepare for the upcoming school year, the NWS is launching a Back to School social media campaign. Educators preparing for the new school

Whether in a traditional or non-traditional learning environment, NOAA has resources and opportunities ready for you! Explore a wide range of topical material, from the atmosphere to the oceans! noaa.gov/education.

LSTA is proud to serve as a Weather Ready Nation Ambassador

2020 Embrace the Gulf

The Gulf of Mexico provides food, shelter, protection, security, energy, habitat, recreation, transportation, and navigation – playing an important role in our communities, states, region, and nation. To highlight the value and the vitality of the Gulf of Mexico region, the Gulf of Mexico Alliance conceived an awareness campaign “Embrace the Gulf” for the entire year 2020. Louisiana members of the working group are BTNEP's own Susan and Alma.



Educational Facility Planning

The MSBA recognizes the importance of educational programming, especially as it relates to the effective planning, design, and construction of adaptable school facilities. A comprehensive educational program will help inform school designs that are responsive to current teaching and learning practices, while providing flexibility to accommodate future changes in learning environments and educational delivery methods during the useful life of a school facility. To support districts and consultants in the exploration, development, and evaluation of options for proposed projects, the MSBA offers the following resources.

[Educational Program Requirements](#)
[Science Laboratories and STE Learning Spaces Guidelines - NEW!](#)
[Assembly Space Adjacencies in Elementary and Middle Schools](#)
[Break-Out Spaces in Elementary Schools](#)

FREE Weather Curriculum for Middle School Students

Developed to directly address Next Generation Science Standards, this [FREE five-week curriculum unit](#) is designed to help middle school students understand weather at local, regional, and global scales.

A Clean Energy Film and Curriculum FREE to Teachers Grades 6-12

Watch as Robert Redford's son James Redford explores the factors driving the transition to clean energy in his feature documentary HAPPENING. To further engage students, the Redford Center created TEACHING HAPPENING, an interdisciplinary, modular curriculum developed to work alongside HAPPENING. [Click here to watch a short trailer.](#)

Free to teachers, the classroom version of the film runs 50 minutes and the curriculum is aligned with national standards for grades 6-12 in Science and English. To access your **free** HAPPENING streaming link and educational curriculum, [click here](#)

Applications Open for the SeaWorld & Busch Gardens Environmental Excellence Awards!

Applications are now open for the 2019 SeaWorld & Busch Gardens Environmental Excellence Awards! Since 1993 these awards have provided national recognition, funding and a big "thank you" to support the work of young conservation leaders across the country. The Youth Environmental Excellence Awards program is coordinated by the SeaWorld & Busch Gardens Youth Advisory Council, a group of young conservation leaders from across the country who provide input and leadership, from a youth perspective, to SeaWorld programs and conservation initiatives.

This year, SeaWorld is proud to support the work of young conservation leaders with two award opportunities – the SeaWorld & Busch Gardens Environmental Excellence Award which recognizes young leaders for their ongoing environmental conservation work and the Youth Entrepreneurial Award, which provides start-up funding to young leaders who propose environmentally proactive solutions that will solve a problem relevant to the applicant's community.

All awardees will receive a trip for two to SeaWorld Orlando to the Environmental Excellence Awards reception as well as \$1,000 to assist in helping with their efforts to change our world. Awardees will also gain recognition for their work in SeaWorld parks and through online and social media presence.

Your students and program participants ages 22 and younger are invited to apply for this year's awards program by August 26, 2019. Visit: <https://seaworldentertainment.com/programs/environmental-excellence-awards/> for complete details and e-mail seaworldconservation@gmail.com with any questions.

Louisiana Earth Science Teachers Association

**Louisiana Earth Science Teachers Association
2019 OUTSTANDING EARTH SCIENCE TEACHER AWARD
Nomination / Application Form**

The form below is a fillable PDF.
Please use it to type in your responses.

Louisiana Earth Science Teachers Association will recognize an Outstanding Earth Science Teacher (grades K-12) who demonstrates exemplary teaching of earth science or incorporates exemplary earth science teaching in their specific, grade level curriculum. The nominee must be a full-time science teacher or full-time classroom teacher with all the responsibilities of such a position and have **at least 3 years** classroom teaching experience.

The award consists of a \$100 cash award and a plaque. The teacher recognized may also be recommended to the National Geoscience Teachers Association for their annual recognition program.

I. Nominee Information

Nominee's Name _____ Years Teaching _____

Street _____

Address _____

City, State, Zip _____

Email _____ Phone _____

Address _____

College/University Attended _____ Degree(s) _____

Major _____ Current Grade Level (s) Teaching _____

Annual Percentage Class Time Devoted to Teaching Earth Science _____

School Name _____ Phone _____

School Address _____

School Principal _____

School District Superintendent _____

District Address _____

Nominator's Name _____ Nominator's Email _____

Signature of Nominator _____

Signature of the Nominee _____

- II. *Respond to the following, using no more than **one typed page** per item below with no smaller than **11 point font**. You may include supporting documentation as appropriate.*

1. **Teaching ability:** What techniques does the nominee/applicant employ? What is his/her teaching philosophy? Are lessons challenging and comprehensive? Do students enjoy the lessons?
2. **Inventiveness:** What new ideas, materials, software, instructional strategies, or techniques has the nominee/applicant incorporated or developed?
3. **Initiative:** How does the nominee/applicant handle new situations and accommodate students of various abilities?
4. **Strengths:** What are the principal strengths of the nominee/applicant?
5. **Community involvement:** How is the nominee/ applicant involved in community and/or youth activities?
6. **Other activities:** Professional activities and noteworthy accomplishments.
7. **Please include 3-5 letters of support** from individuals who are familiar with the exemplary earth science teaching of the applicant and can corroborate the teaching described.

Please submit the Nominee Information Sheet, narrative items 1-7 above, letters of support and any other supporting documentation in one packet by September 16, 2019 to:

Mail to:
Louisiana Earth Science Teachers Association
Attn: Lynda LaFleur
4319 Mandeville St
New Orleans, LA 70122

Scan entire packet to:
lafleur@bellsouth.net

Nurdle Patrol

The Nurdle Patrol is a citizen science project lead by the Mission-Aransas National Estuarine Research Reserve at the University of Texas Marine Science Institute in Port Aransas, Texas. They are looking to gather information about where nurdles are located across Texas and the rest of the Gulf of Mexico, remove the nurdles from the environment, and create awareness about the nurdle issue.

If you want to participate in collecting data there are instructions and [a training video on their website](#). For more information visit <https://missionaransas.org/nurdle-patrol> and/or contact Jace with the information below.

Jace Tunnell

Director, Mission-Aransas National Estuarine Research Reserve
University of Texas Marine Science Institute
750 Channel View Drive, Port Aransas, TX 78373
Office: 361-749-3046
Cell: 361-244-8665
Email: Jace.Tunnell@austin.utexas.edu
www.missionaransas.org



LSTA Membership / Change of Address Form

Membership Dues (Check one box.)

- 1 year membership \$15.00
- 3 year membership \$40.00
- Full Time Student - 1 year membership \$10.00



Name: _____

Email Address: _____

***** Email must be provided to receive correspondences from LSTA (including the LASER)*****

- Check here if you are interested in receiving the science E-blast!

Alternative Email Address: _____

Parish: _____ School: _____

Preferred Mailing Address (Check one box): Home Work School

Contact Phone: _____

*****Helpful when serving on committees (not required)*****

Print and mail form with dues to:

LSTA Membership
 Attention: Nathan Cotten
 P.O. Box 5097
 Houma, LA 70361

ALL CHECKS SHOULD BE MADE PAYABLE TO: LSTA