



1st Quarter LaSTEM Advisory Council Meeting

Virtual

1/20/22



1st Quarter LaSTEM Advisory Council Meeting January 20, 2022 | 10:00 a.m. – 11:30 a.m.

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|----------------------------|---|
| 10:00 am - 10:15 am | <ul style="list-style-type: none">- Agenda Overview Welcome (Dr. Clint Coleman, LaSTEM Program Administrator)A. New Member Introduction – Dr. Lindsey Keith-Vincent (LaTECH)B. Roll CallC. 3rd and 4th Quarter Meeting Minutes Approval |
| 10:15 am – 11:15 am | <ul style="list-style-type: none">- Council Discussion (Dr. Clint Coleman)A. Outcomes from the Director’s RetreatB. LaSTEM Summit (February 8th)C. Regional STEM Network Center Report-Out (Region 2 and 6) |
| 11:15 am – 11:30 am | <ul style="list-style-type: none">- Other Business, Adjourn (Dr. Clint Coleman)A. Public CommentsB. LaSTEM Quarterly Meetings for 2022<ul style="list-style-type: none">- Thursday, April 28, 2022, Time TBD- Thursday, August 18, 2022, Time TBD- Thursday, November 17, Time TBD |



Welcome to the LaSTEM Council!

Dr. Lindsey Keith-Vincent

Dr. Lindsey Keith-Vincent serves as the Associate Dean of Research, Outreach and Innovation in the College of Education and the Director of the Science and Technology Education Center (SciTEC) at Louisiana Tech University. She was appointed to the commission by Governor John Bel Edwards. Dr. Vincent is a first-generation college completer and a graduate of Ouachita Parish High School. She earned a B.A. in Secondary English Education, an M.S. in Adult Education, certification in Biology education, and an Ed.D. in Educational Leadership from Louisiana Tech University. She holds a certificate in Positive Psychology from the University of Pennsylvania as well as a certificate from Johns Hopkins University in contact tracing, both acquired through Coursera. She also holds a certificate in Digital Wellness from the Digital Wellness Institute and serves as part of the founding team for the new LSU Health Sciences and Louisiana Tech University Digital Literacy and Well-Being Collaborative.

Dr. Vincent has helped launch innovative programs including the first cyber education certificate with colleagues at Cyber.org and the UTeachTech teacher preparation model created at UT Austin and supported with seed funding from the National Math Science Initiative and the Howard Hughes Medical Institute. She has served as PI or CoPI on a number of funded efforts including some sponsored by the National Science Foundation, NASA, US Department of Education, Louisiana Department of Education, and the Charles Mott Foundation. She was selected as the 2021 William Craig Outstanding University Educator by the Louisiana Science Teachers Association, the Vantage Visionary Educator, and the LACUE Post-Secondary Regional Educator of the year and has served on the Louisiana Sparta Groundwater Commission, the National Girls Collaborative leadership team, as Co-Director of the Louisiana branch of the International Technology and Engineering Educators Associate (ITEEA) and is a graduate of the University of Louisiana System Management and Leadership Institute.

Lindsey's experiences and love for students have shaped her aspirations and guided her desire to help provide authentic educational experiences for every learner. In her free time, she likes to learn new things and travel with her children and husband, Matthew, a secondary math educator



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LaSTEM Director's Retreat

- First Annual LaSTEM Director's Retreat took place at NWSU CenLa campus on 11/11/21
 - Dr. Kristine Strickland, Chancellor Fletcher Technical Community College served as the facilitator
 - Act 392 and Regional STEM Center quarterly progress reports were discussed.
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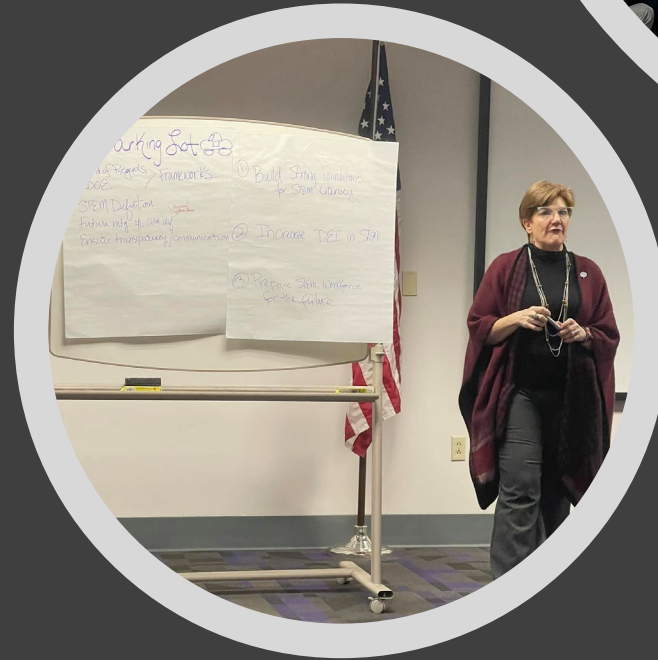
AGENDA LaSTEM Director's Retreat November 11, 2021 9 am- 4pm

- I. Welcome (9 am- 9:15 am)
 - a. Dr. Clint Coleman, Program Administrator of LaSTEM/Cybersecurity
 - b. Introduction of our facilitator, Dr. Kristine Strickland, Chancellor, Fletcher Technical Community College
- II. Ice Breaker Session (9:15 am – 9:30 am)
- III. Act 392 (9:30 am – 10:15 am)
 - a. What is included?
 - b. What are we doing, what are we not doing?
- IV. Break (10:15 am-10:30 am)
- V. SWOT Analysis of ACT 392 (10:30 am – 11:30 am)
- VI. Closing the Gaps (11:30 am – 12:00 pm)
- VII. Lunch (12:00 pm – 12:30 pm)
- VIII. Creating our Vision and Promise to LA (12:30 pm – 1:30 pm)
- IX. Telling our Story (1:30 pm – 2:15 pm)
- X. Break (2:15 pm – 2:30 pm)
- XI. Engaging our Constituents and Gathering Data (2:30 pm – 3:00 pm)
- XII. Parking Lot and Other Topics (3:00 pm – 3:30 pm)
- XIII. Adjournment 3:30 pm

*The Board of Regents is an Equal Opportunity
and ADA Employer*

First Annual LaSTEM Director's Retreat

- Representatives from LDOE, BoR, LaSTEM regional staff, as well as Senator Hewitt attended
- Discussion revolved around shared and unique goals for the regional centers.
- Three major goals of LaSTEM were discussed and accepted by each of the regional centers



First Annual LaSTEM Director's Retreat

- **LaSTEM Goal 1: Build strong foundations for STEM literacy by ensuring that every American has the opportunity to master basic STEM concepts and to become digitally literate.**
- **LaSTEM Goal 2: Increase diversity, equity, and inclusion in STEM and provide all Americans with lifelong access to high-quality STEM education, especially those historically underserved and underrepresented in STEM fields and employment.**
- **LaSTEM Goal 3: Prepare the STEM workforce for the future—both college-educated STEM practitioners and those working in skilled trades that do not require a four-year degree—by creating authentic learning experiences that encourage and prepare learners to pursue STEM careers.**
- **Discussions around metrics to measure each of these goals are ongoing. Will integrate into quarterly progress reports**

2022 Annual LaSTEM Summit

- Back in person at the Raising Cane's River Center
 - This year's theme focuses on Workforce
 - Industry breakfast (50 attendees)
- Registration is open!
 - 30 Presentations with topics from preK to workforce
 - 5 Teacher workshops
 - 3 Industry-led Panel Discussions
 - Nationally known keynote (next slide)
 - 4 mobile STEM outreach vehicles
 - Robotics Room (VEX, REC, First)
 - E-Sports Room
 - 30+ booths (vendors/non-profits/school groups)
- Awareness campaign started in November at LaSTEM Regional Centers and Board of Regents
- 359 attendees already registered!



LaSTEM 2022
Annual Summit
"Working Together for a Future that Works!"

When
Tuesday, February 8, 2022 from 8:00 AM to 4:00 PM CST
[Add to Calendar](#)

Where
Raising Cane's River Center, Baton Rouge, LA
275 S River Rd
Baton Rouge, LA 70802



Please join us at the rescheduled LaSTEM Annual Summit on February 8th, 2022! We are back in person at the Raising Cane's River Center in downtown Baton Rouge. Come learn about all the great things LaSTEM has been up to this year.

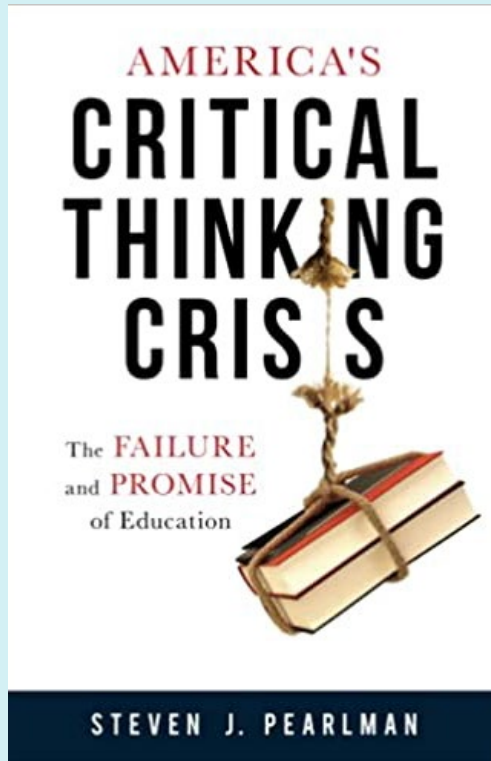
[Register Now!](#)

The format for the Summit includes: 1) Three moderated panels that will focus on listening AND responding to the workforce needs of business and industry and promoting more women and girls in STEM; 2) Promising practice breakout sessions that will focus on successful college and career readiness practices and programs provided by businesses, education, and/or community organizations that are working; 3) Live demonstrations by students; and 4) Vendor presentations.

Keynote Speaker: Dr. Steven J. Pearlman
"Solving for Academia's sySTEMic Critical Thinking Crisis". What's the state of STEM education and critical thinking? What's the difference between the scientific method and critical thinking? Is mathematical thinking critical thinking? What is the current state of STEM education and critical thinking outcomes relative to other disciplines? And if you're STEM educator who wants more critical thinking from your students (and who wouldn't

Keynote: Dr. Steven Pearlman

Author of “America’s Critical Thinking Crisis: The Failure and Promise of Education”



- Co-Founder of The Critical Thinking Institute
- Title of his presentation: **‘Solving for Academia’s sySTEMic Critical Thinking Crisis’**
- 600 signed copies of his book for attendees



LSU Cain Center for STEM Literacy

[Building STEM Capital in Region 2]

LaSTEM Advisory Council Meeting
January 20, 2022





Who We Are

**LaSTEM
Region 2
Network Center**



**LSU
Cain Center for STEM
Literacy**



**Research-based
STEM Integration
Framework**

**Relevant Career
Connected Pathways
& Educator Support**

Member Support



Theory of Action

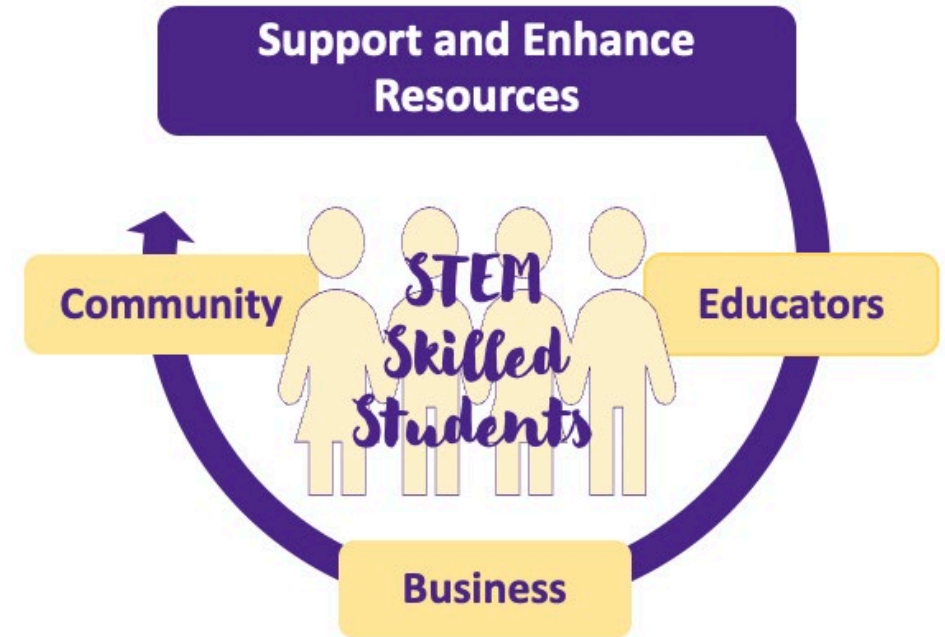
OUR CHALLENGE

Everyone must be equipped with the set of knowledge, skills and mindsets associated with STEM to enter the workplace and then succeed in both middle- and high-skill jobs.

A MAJOR OBSTACLE

New “Future-of-Work” skills and experiences are hard for students to acquire in traditional education models.

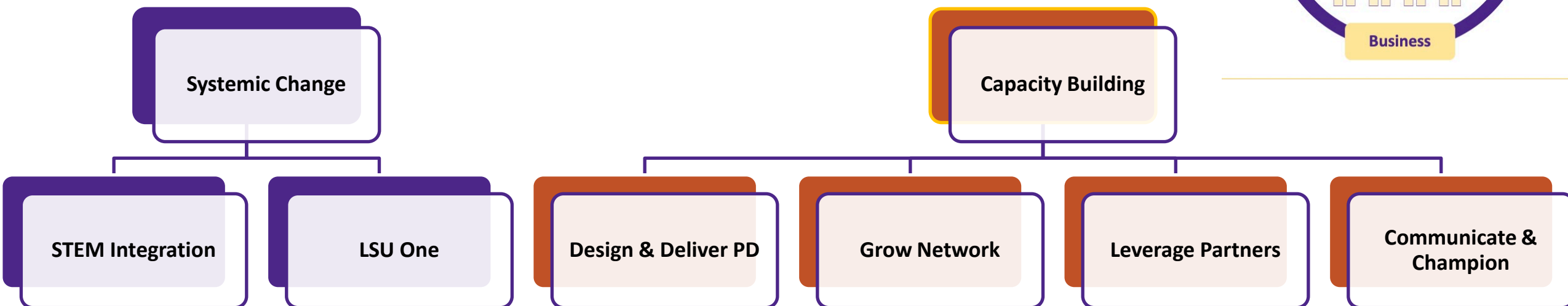
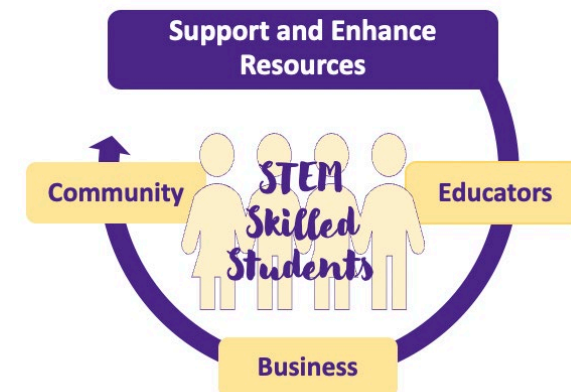
OUR APPROACH TO INCREASING ACCESS



Highlights of Our Work

If we can enhance practices of all stakeholders who influence the learning of children, youth, and young adults, we can increase access to high-quality and inspiring STEM and college and career readiness opportunities and pathways.

OUR APPROACH TO INCREASING ACCESS



STEM Integration Framework

RESOURCE: A FRAMEWORK for Planning, Integrating, and Sustaining Practices Aligned to Workforce Needs

Leadership & Program Design

Well-represented leadership team that builds a vision and data-driven plan for integrating high-quality and equitable STEM-rich programs and school culture aligned with post-secondary options and Future of Work competencies and options.

Educators

Collaborative environment, peer mentoring, and professional development resources and instructional methods, 2) Leadership skills for advising students, 3) Business and industry workforce awareness of future needs, and 4) Workforce awareness of future needs.

Curriculum

Project-based STEM instruction and interdisciplinary curriculum aligned to opportunities to gain "future of work" competencies (in both formal/informal learning environments).

Stakeholder Engagement

Meaningful engagement for 1) connecting students (and educators) with work-based experiences, 2) providing career advice and exposure, 3) offering programming, and 4) exposing families and community to STEM education.

Advocacy & Sustainability

Advocate for policies that provide equitable access to STEM education and promote continuous evaluation and partnering to enhance sustainability efforts.

FRAMEWORK TOOL for Self-Assessment & Planning

Reflective of national STEM education blueprints, this tool can be used to stimulate discussion and action towards a plan for growth or improvement of STEM programming at any level - elementary, middle, and high school.

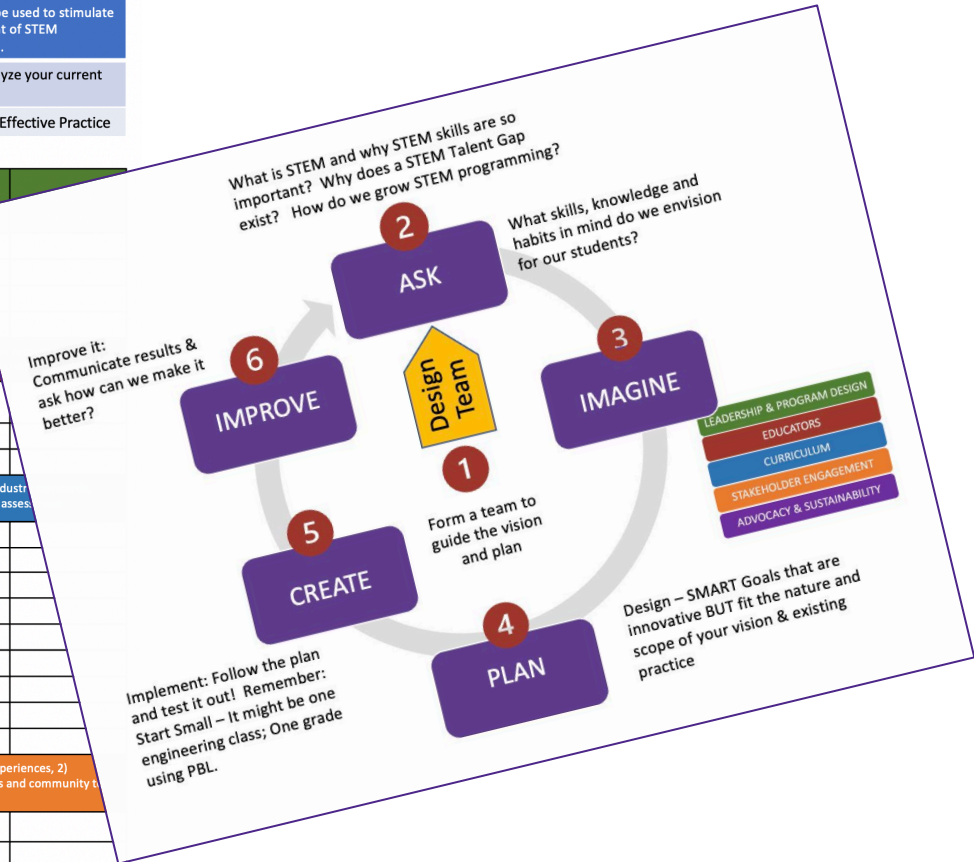
Use this tool as an opportunity to: 1) Learn what is working well for others nationally; 2) Honestly analyze your current efforts; and 3) Gauge growth from year to year.

1. Exploratory	2. Introductory	3. Progressing	4. Highly Effective Practice
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School:

Leadership & Program Design	Well-represented leadership team that builds a vision and data-driven plan for integrating high-quality and equitable STEM-rich programs and school culture that are aligned with post-secondary options and Future of Work competencies and options.	
	1. Annual Planning for STEM integration using a "Design Team" and adopted community-wide	
	2. STEM literacy a priority, accessible for ALL students	
	3. Student Support Systems – Advisories; Graduation plans; Strategic use of out-of-school programs	
	4. Educator Support Systems – Professional Development Plan, Common Planning Time, Resources	
Educators	Collaborative environment and professional development for gaining 1) STEM integration, 2) Instructional methods, 2) STEM culture and growth mindset, and 3) Workforce awareness of future needs.	
	5. Professional Development/Collaboration time for STEM integration into the curriculum and STEM culture and growth mindset	
	6. Opportunities to gain business and industry workforce awareness and skills	
	7. Strategies for building industry and postsecondary partnerships and connections	
Curriculum	Integrated & interdisciplinary STEM curriculum & instruction aligned to academic and industry with opportunities to gain "future of work" competencies listed below (in anysetting) + assessment.	
	8. Artificial Intelligence and Data Literacy	
	9. Computational Thinking	
	10. Digital & Media Literacy & Citizenship	
	11. Building, Making, & Design Thinking & Engineering	
	12. Real World Problem Solving and Project-based Learning	
	13. Communication, Teaming, and Lifelong & Flexible Learning	
	14. Career Exploration and College Credits (Activities, STEM Pathways, Credentials, Credits)	
	15. Extracurricular Activities, Competitions, and Community Involvement	
	16. Authentic Assessment of Mastery	
Stakeholders	Meaningful engagement for 1) connecting students (and educators) with work-based experiences, 2) providing career advice and exposure, 3) offering programming, and 4) exposing families and community to STEM education.	
	17. Connections to Higher Education – Aligned to STEM Pathways, Credit Completion, etc.	
	18. Connections to Community, Family, and Business – Partnerships for providing work-based experiences, such as mentorships, internships, & externships, STEM pathway advice, opportunities beyond school day, and support and sustainability for programs	
Advocacy & Sustainability	Advocate for policies that provide equitable access to STEM education and professional learning at all levels and promote continuous evaluation and partnering to enhance sustainability efforts.	
	19. Advocacy for STEM education policy	
	20. Continuous Partner Building, Planning, Continuous Improvement, and Communicating of Results	

Improve it: Communicate, ask how can it be better?





LSU ONE

One-Stop-Shop designed to streamline systems that will increase student access to STEM Experiences, DE Coursework, Credentials and Support

- Over 100 LSU A&M, LSUA, LSUE, and LSUS courses for college/HS credit
- Over 30 LSU STEM Pathways courses in Biomedical Sciences, Computing, Digital Design & Emergent Media, Pre-Engineering (many leading to IBCs)
- Academic development, after-school, and summer programs for students
- Integrating highly motivating programs such as Esports and/or Aquaponics
- Academic advising and human resource support
- STEM Framework for planning

Professional Development

6-12 Pathway
Cohorts (160) +
PK-5 Cohort (20)

General PD

Learning Tour
Districts)

Bi-monthly
STEMTalks

Instructional strategies such as PBL, content knowledge & technology; Framework; Ongoing coaching

STEM outreach and mentoring girls; Code.Org workshop

(2) Texarkana ISD (Dual Enrollment + Elementary STEM)

Planning for STEM; Learning Blade; Virtual office hours

Panels and presentations: Listening to





Grow Network Membership

Visits, meetings, events, & surveys

- STEM highlights, needs, challenges and areas of mutual interest and expertise
- Introduce LaSTEM and goals of CAS
- STEM integration awareness of and use of Framework as a tool
- Catalyze future work

GROUPS

School Districts
Teacher Education
Out-of-school-time Providers
Women in STEM
Public Libraries
Region 2 Workforce
Development
Regional Chamber
Families



- STEM outreach & mentoring practices {Mentoring Playbook}
- Professional development; {Summit}
- Catalyze/develop/co-host projects
- Special focus on A.L.I.C.E. population
- Pledge to Mentor Campaign
- Membership growth (from 12 to 130)

Grow Network Membership

Girls' Day
at the
MUSEUM
Saturday, March 26, 2022
10 a.m. to 3 p.m.

{March}

GIRLS HACK

[FOR GOOD]

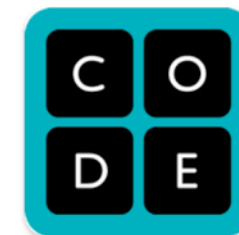
{April}





Leverage Partners for Outreach

Engaging and supporting multi-sector partners needed for advice/outreach

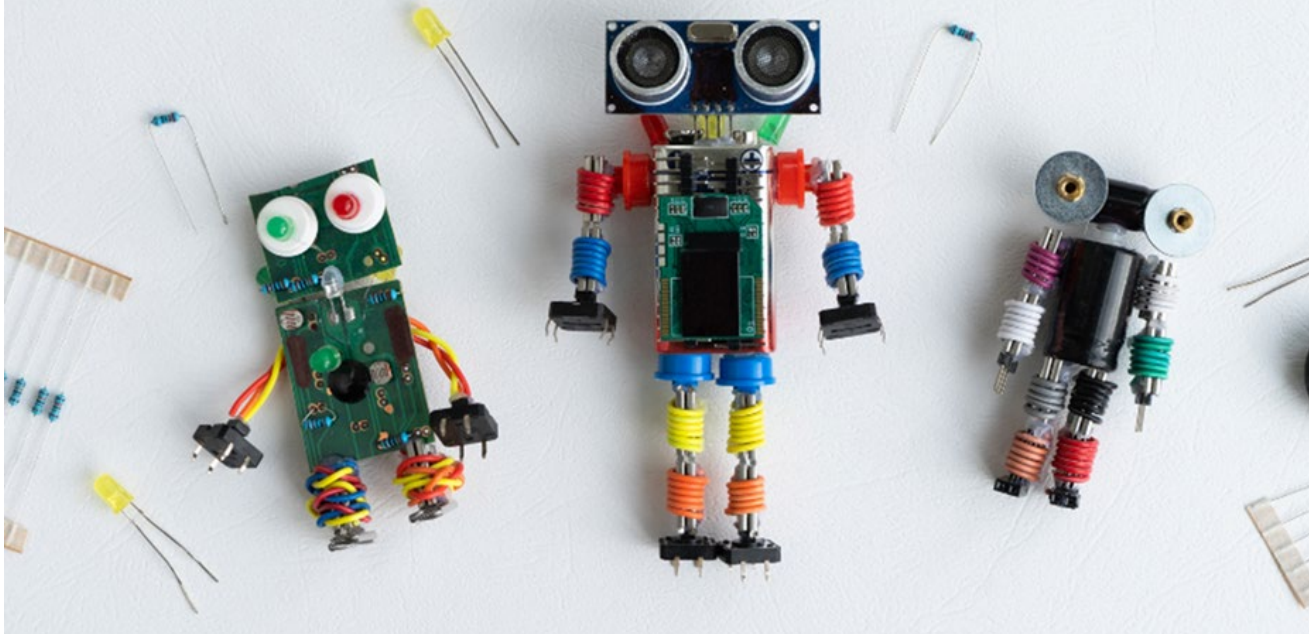


CENLA STEM REGION 6

NSU@CENLA
England Airpark



SCIENCE • TECHNOLOGY • ENGINEERING • MATH



Building a
Community
Around STEM
and
Integrating STEM
into PreK-16

LaSTEM Advisory Council Meeting
January 20, 2022

Working Together to Promote STEM in Region 6



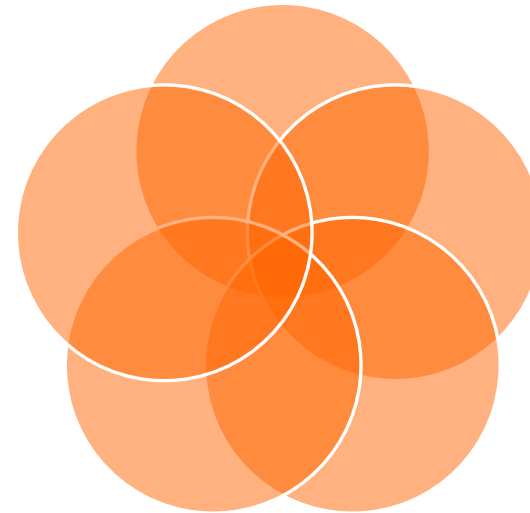
PreK - 12

Higher
Education
Institutions

Industry
Partners

Community
Organizations

Economic
Development
Agencies

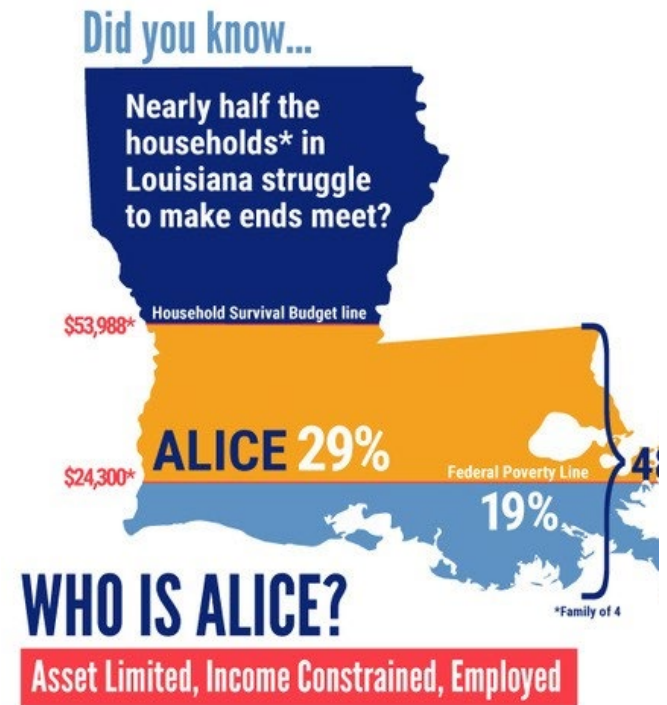


CenlaSTEM Goals & Progress



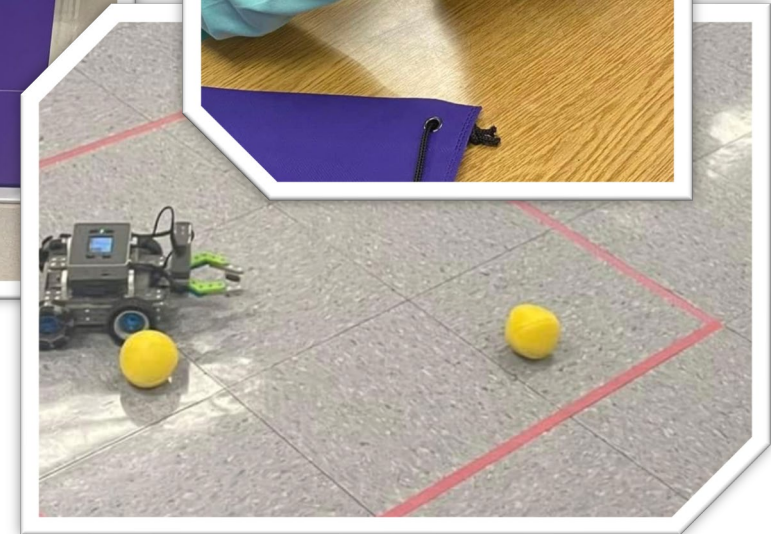
CenlaSTEM Goals & Progress

- Foster Involvement
- Regional Workforce Gaps and Needs
- Strategic Planning



CenlaSTEM Goals & Progress

- Contribute to a Statewide Stem Expansion Process
- New STEM Programs
- Leverage Resources





Together
we can
make a
difference!