

# THE COMMUNITY BLUEPRINT

PEOPLE | PLACES | POSSIBILITIES

REAL STORIES. BRIGHTER TOMORROWS.

ISSUE 1 | 2026

FEATURE STORY

## MISSION TO THE BLUE

Expanding Access.  
Igniting Curiosity.  
Building What's Next.

A Delta STEM Tour  
for Stronger  
Communities

*Today's  
Learners.  
Tomorrow's  
Leaders.*



CURIOSITY  
CHALLENGE  
SUPPORT  
OPPORTUNITY  
BRIGHTER  
TOMORROWS



[cgroomers.org](http://cgroomers.org)

---

# THE COMMUNITY BLUEPRINT

## A COMMUNITY GROOMERS PUBLICATION

The Community Blueprint is an official publication of Community Groomers, LLC. This publication highlights Community Groomers programs, partnerships, educational initiatives, community engagement, and the people helping expand opportunities throughout the Mississippi Delta.

*Building pathways through exposure, critical thinking, and experience.*

# AT A GLANCE

Community Groomers creates hands-on educational experiences that expand exposure, strengthen critical thinking, and give young people opportunities to learn by doing. Rooted in the Mississippi Delta, the organization connects STEM, education, leadership, creativity, research, and community.

## EXPOSURE

Introduce young people and communities to ideas, disciplines, experiences, and pathways they may not otherwise encounter.

## CRITICAL THINKING

Use hands-on challenges, observation, creativity, problem-solving, and reflection to strengthen how participants approach learning.

## EXPERIENCE

Create opportunities to apply knowledge through projects, leadership, service, teaching, exploration, and real-world STEM activities.

### PROGRAMMING HIGHLIGHTED IN THIS ISSUE

Delta STEM Tour • Let's Build • Nature Art Showcase • Mission to the Blue  
Education, Training & Scholarship Initiative • S3L Internship Program

**BUILDING PATHWAYS THROUGH EXPOSURE, THINKING, AND EXPERIENCE.**

WELCOME TO

# THE COMMUNITY BLUEPRINT

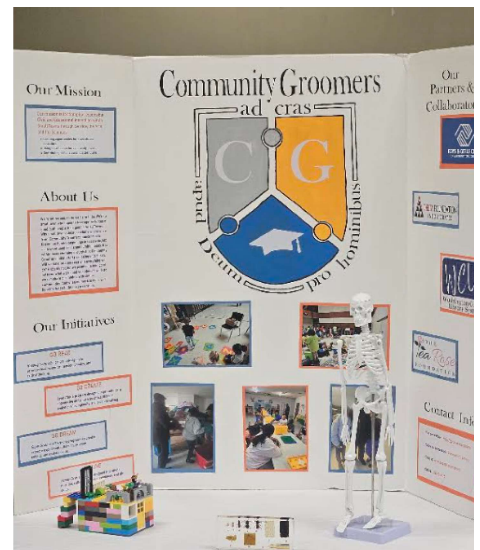
## A blueprint begins with a vision.

It takes an idea of what *could be* and provides a pathway for turning that vision into something real. At Community Groomers, that means creating opportunities that allow children, young adults, families, and communities to learn, explore, develop, and grow.

## The Community Blueprint was created to share those stories.

Throughout this inaugural issue, STEM comes to life beyond a traditional classroom. Young people learn through LEGOs, science, art, engineering, research, leadership, and community service. Community Groomers brings experiences directly into Mississippi Delta communities - and even reaches toward the edge of space.

But the blueprint is bigger than STEM. Opportunity also means education, career preparation, mentorship, leadership development, scholarships, professional skills, and access to experiences that help young people imagine what comes next.



## COMMUNITY GROOMERS

The Community Groomers display highlights the organization's mission, partnerships, and educational initiatives.

LEARN MORE. GET INVOLVED.



PROGRAMS • PARTNERSHIPS • COMMUNITY

THIS IS  
OUR WORK.  
OUR COMMUNITY.  
OUR BLUEPRINT.

# THE COMMUNITY BLUEPRINT

PEOPLE | PLACES | POSSIBILITIES

ISSUE 1 | 2026

REAL STORIES.  
BRIGHTER TOMORROWS.

*"From  
Today's Learners  
to Tomorrow's  
Leaders."*

## TABLE OF CONTENTS

01 **Welcome to TCB** 4

A message to our readers.

02 **MEET THE FOUNDERS** 6

Dr. Kevin & Bianca Epton



03 **Delta STEM Tour** 8

Communities. Curiosity. Connection.

04 **Let's Build Initiative** 10

Play. Learn. Grow.

05 **Built Through the Struggle** 12

Rethinking Failure, Support, and Learning

06 **Where Creativity Meets Curiosity** 15

Nature Through Their Eyes

07 **Verna Gibbs Interview** 16

A Voice for Cary, MS

08 **Education Initiative** 17

Creating opportunities for all learners.

09 **S3L Interns** 19

Empowering the next generation.

10 **FEATURE ARTICLE** 24

### MISSION TO THE BLUE

Exploring. Learning. Expanding Access.



11 **How Do Cellular Phones Work?** 26

By Dr. Kevin Epton

12 **Try It Yourself!** 29

Balloon Rocket

13 **Acknowledgements** 31

Gratitude to Our Community

- CURIOSITY
- CHALLENGE
- SUPPORT
- OPPORTUNITY
- BRIGHTER TOMORROWS

*A Higher  
Tomorrow  
Is Possible.*



EDUCATION



EQUITY



COMMUNITY



OPPORTUNITY

*More than a magazine.  
A movement.*

# MEET THE FOUNDER

DR. KEVIN EPSON

**The Almighty did not put a negative filter on talent creation and point it at the Delta.**

- DR. KEVIN EPSON



## BLUEPRINT Q&A

IN HIS OWN WORDS

### 1 What inspired you to create Community Groomers?

For decades, my interests have been split between hands-on efforts, researching, and teaching. Community Groomers gives me the opportunity to pursue all three of these in the region closest to my heart - the Mississippi Delta.

### 3 Why did you choose STEM as a major area of focus?

Interest in the STEM disciplines is very native to me! My father was a graduate of Mississippi Valley State University's Engineering Technology program. As a child, I learned the basics of electrical circuits from him, which led to me becoming a self-proclaimed 'geek' in college. From there, I established a career across multiple technology and engineering disciplines. I really believe in the vastness of STEM and see much potential in its influence throughout the Delta. I also recognize the value of non-STEM disciplines; for instance, I read Shakespeare often and I compose music.

### 5 What does community development mean to you?

For me, community development means exposing community stakeholders to potentially beneficial pathways, helping stakeholders by equipping and mentoring them appropriately, and finally facilitating growth opportunities for them. This aligns with my desired outcomes for Community Groomers - Exposure, Critical thinking development, and Experience.

### 2 Why is the Mississippi Delta important to you?

The Delta is my place of origin. I've developed an affinity for the region and its people, while becoming all too aware of its economic and educational challenges. Even before moving to pursue my own career development, I longed to play a role in socio-educational intervention.

### 4 What do you want young people to gain from these programs?

Exposure, critical thinking development, and experience! I am not interested in 'converting' participants into STEM majors. However, I believe in the influence of studying STEM disciplines and the transferable skills that come along the way. The big three takeaways are: 1) Exposure, 2) Critical thinking development, and 3) Experience - in that order.

### 6 What is your vision for Community Groomers five years from now?

I see Community Groomers implementing STEM programming in many schools across the Delta for K-12 as well as project-oriented programming at the collegiate level. I see partnerships between Community Groomers and Delta counties, facilitating multiple pathways of intervention. To quote my favorite Shakespeare play, I have a vision of the Mississippi Delta becoming 'a little academe.' I believe we can do it. The Almighty did not put a negative filter on talent creation and point it at the Delta; we've got the same talent potential as areas like New England, DC, and California - it just has to be drawn out and developed, that's it.

### THE BIG THREE:

EXPOSURE • CRITICAL THINKING DEVELOPMENT • EXPERIENCE

6

### A LITTLE ACADEME.

A vision for STEM programming, collegiate projects, and partnerships across Delta counties.

# BIANCA EPSON, M.Ed., M.A.

EDITOR-IN-CHIEF | EDUCATOR | ADVOCATE



## BIANCA EPSON, M.Ed., M.A.

THE COMMUNITY BLUEPRINT EDITOR-IN-CHIEF

Licensed K-12 Educator

Master-Level Trained in Clinical Mental Health

## BUILD - BREAK - BRIDGE - REFLECT

A framework centered on critical thinking, connection, application, and reflection.

EDUCATION + MENTAL HEALTH + ACCESS

## BUILDING ACCESS. SUPPORTING THE WHOLE STUDENT.

My work in education and clinical mental health has shown me that learning and mental well-being cannot be separated. Students do not enter classrooms without the experiences, stressors, barriers, and circumstances that affect their lives outside of school. This understanding helped shape my Build-Break-Bridge-Reflect Framework, which encourages young people to build on what they know, break down challenges and ideas, bridge new learning with their experiences, and reflect on how they can apply what they have learned. Through Community Groomers, I want young people to have opportunities that strengthen critical thinking while also creating environments where they feel supported, capable, and encouraged to explore what is possible.

I also believe we have to be intentional about creating access for all students, particularly those who may not traditionally have access to STEM experiences, enrichment programs, mental health resources, or other opportunities that support their development. Where a student lives or the resources available in their community should not determine how much they are allowed to dream, learn, or experience. For me, Community Groomers sits at the intersection of education, mental health, and community, allowing us to create experiences that support the whole student. The goal is not simply to expose young people to new opportunities, but to help them develop the confidence, support, and skills they need to see themselves as capable of pursuing those opportunities.



*Where a student lives should not determine how much they are allowed to dream, learn, or experience.*

- BIANCA EPSON

# BRINGING HANDS-ON STEM LEARNING TO LIFE

BELZONI, MS

SUMMER 2026



## PAPER LUNGS IN ACTION

Bianca Epon works with Delta STEM Tour participants.  
Belzoni, MS | Summer 2026



## CONNECTING WITH COMMUNITY

Dr. Kevin Epon engages parents during the Delta STEM Tour.  
Anguilla, MS | Summer 2026

## LEARNING BY DOING. BUILDING CONNECTIONS.

The Delta STEM Tour brings interactive learning directly into Mississippi Delta communities. In Anguilla and Belzoni, participants explored the respiratory system by building and testing paper lung models, turning a science concept into something they could see and experience. The tour also creates opportunities for parents and community members to engage with STEM learning and the possibilities it can open for young people.

## SIMPLE MATERIALS. BIG LEARNING. STRONGER CONNECTIONS.

EXPLORE • BUILD • TEST • REFLECT • ENGAGE

Hands-on STEM gives students and families opportunities to learn, ask questions, and discover together.

# THREE EXHIBITS. THREE WAYS TO DISCOVER.



## DOCTOR WHO? DOCTOR WHAT?

A young scientist tests the paper-bag lung model she created during the Delta STEM Tour in Cary, Mississippi - Summer 2026.



## CREATURE, CREATURE! IN ACTION

Dr. Kevin Epon demonstrates microscope use with insect specimens in Mayersville, Mississippi - Summer 2026.

**DOCTOR WHO? DOCTOR WHAT?** Explore skeletal, digestive, and respiratory systems through interactive anatomy and health-science learning.

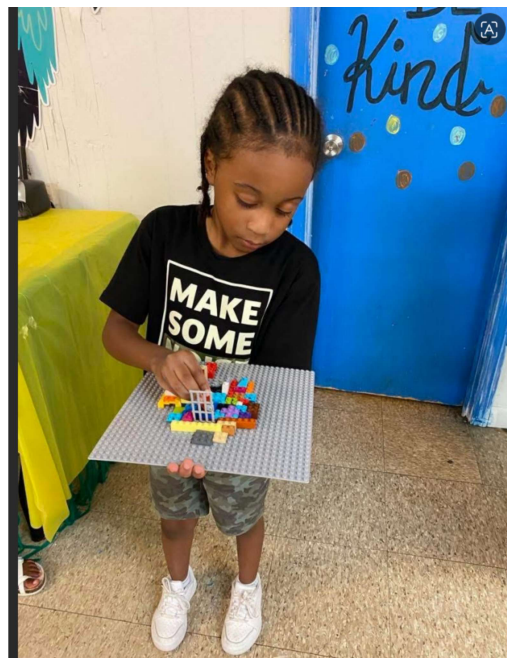
**CREATURE, CREATURE!** Look closer at insects, spiders, microscopic organisms, and specimens through scientific observation.

**LEGO STORYBUILDERS** Use LEGO bricks, imagination, teamwork, storytelling, and creative problem-solving to overcome challenges.

## LET'S BUILD INITIATIVE

# MORE THAN BUILDING BLOCKS

The Let's Build Initiative is a multi-application program designed to support children's cognitive, emotional, and social development through structured, hands-on learning experiences. It integrates STEM education, creative expression, play-therapy principles, and skill-building strategies to promote critical thinking, emotional regulation, creativity, and problem-solving in school-aged children.



### LEGO STORYBUILDERS IN ACTION

A LEGO Club participant proudly shows off a StoryBuilders creation at the Boys & Girls Club of Washington County in Greenville, Mississippi - Summer 2024.

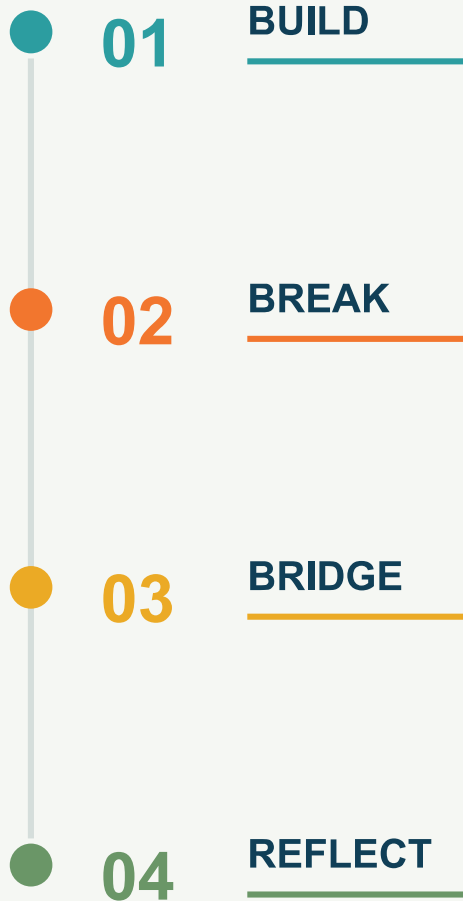
## THE LET'S BUILD APPLICATIONS

1. Let's Build STEM Series - 4-week guided LEGO challenges
2. Let's Build Pop-Up Experience - one-day STEM engagement
3. Therapeutic Play Model - emotional regulation and self-control
4. Facilitator Training Framework - training for educators and youth workers
5. Nature Art Showcase - science, nature, and creative expression

# BUILD. BREAK. BRIDGE. REFLECT.

The facilitator training framework gives Let's Build a distinctive developmental structure. Through guided, play-based LEGO experiences, non-clinical professionals can support emotional regulation, critical thinking, problem-solving, and STEM-based learning in everyday

Developed by Bianca Epton, M.Ed., M.A.



Engage with the challenge and create.

Encounter difficulty, change, or disruption.

Connect the experience to coping and problem-solving.

Think about choices, learning, and next steps.

## THE BIG IDEA:

A LEGO brick is only the tool. The learning happens through the decisions, frustration, creativity, communication, adaptation, and reflection that take place while building.

# Built Through the Struggle:

## Rethinking Failure, Support, and What It Means to Learn

By Bianca Epson, M.Ed., M.A.

As an educator, counselor, and community advocate, I have spent a great deal of time thinking about what helps students become better learners. I have also learned that learning is not always a smooth process. Students get frustrated. They make mistakes. They struggle with new material, question their abilities, and sometimes decide that giving up is easier than trying again.

But I believe those moments matter.

Working with students in the Mississippi Delta has reinforced for me that students bring much more into a learning environment than their academic abilities. They bring their families, communities, responsibilities, previous educational experiences, strengths, challenges, and beliefs about what they can accomplish. Some have had access to enrichment programs, technology, mentoring, and other opportunities, while others may be encountering certain experiences for the first time.

Recognizing those differences does not mean lowering expectations. It means being intentional about how we engage and support learners.

### Build. Break. Bridge. Reflect.

This idea became the foundation for the Let's Build Model, an emerging framework I developed around four stages: Build, Break, Bridge, and Reflect.

Build is where learners explore, engage, ask questions, and develop confidence. Break happens when something becomes difficult. An answer is wrong, a project does not work, or frustration begins to replace confidence. This is often when we see a learner shut down, disengage, act out, or say, "I can't do this."

But the Break is not necessarily a bad thing. It gives us an opportunity to see how a learner responds to challenge.

Bridge is the intentional support provided during that moment. Instead of immediately fixing the problem, an educator, parent, counselor, mentor, or another supportive adult helps the learner work through it. Finally, Reflect encourages the learner to consider: What happened? What did I try? What helped me continue? What can I do differently next time?

The goal is not simply to complete the task. It is also to develop the learner.

### What Difference Can Support Make?

One area of my developing research examines the relationship between failure, frustration, support, and what happens next. I represent that relationship this way:

In simple terms:

**Failure + Frustration = Avoidance**

Failure and frustration can sometimes lead a learner toward avoidance. That may look like disengagement, shutting down, refusing to participate, or acting out. My research asks us to consider what might change when intentional support is introduced during that moment.

In simple terms:

**Failure + Frustration + Support = Persistence + Problem-Solving + Growth**

What this formula tells us is that struggling doesn't mean learning has stopped. With the right support, frustration can turn into persistence, problem-solving, and growth.

Imagine a young person participating in a STEM activity in a Mississippi Delta community. The student begins excited, but the project does not work. After several attempts, frustration sets in.

We could complete the project for the student. We could simply say, "Keep trying." Or we could ask a different question:

**What kind of support does this learner need right now to continue working through the problem?**

Maybe it is encouragement. Maybe it is a question that helps the learner think differently. Maybe it is helping the learner slow down, manage frustration, or break the problem into smaller pieces.

The goal is not to remove the struggle. The goal is to help the learner move through it.

# Rethinking Failure, Support, and What It Means to Learn

## Support Without Lowering Expectations

This matters when we talk about education in the Mississippi Delta. Our communities face real challenges, and access to educational resources and opportunities can vary. But conversations about barriers should not become assumptions about what Delta students can accomplish.

Students can be challenged and supported.

Within the Let's Build Model, Support (Sp) is defined as intentional, real-time adult intervention. It may include emotional coaching, prompting reflection, guiding problem-solving, or reinforcing persistence. Defining support this way moves it from an abstract idea to something we can begin to observe, practice, and eventually measure.

Instead of simply saying, "This student needs more support," we can ask: What does that support look like? When should it happen? And how does the learner respond?

## It Takes a Community to Build a Learner

The Let's Build Model grew from my work at the intersection of education and mental health, but building learners does not happen only in classrooms.

Parents build learners. Teachers build learners. Counselors, coaches, and mentors build learners. Churches, colleges, community organizations, and after-school programs build learners.

Across the Mississippi Delta, we can create spaces where young people explore science, technology, literacy, art, history, culture, and new ideas. Exposure matters, but so does what happens after the excitement wears off and the work becomes difficult.

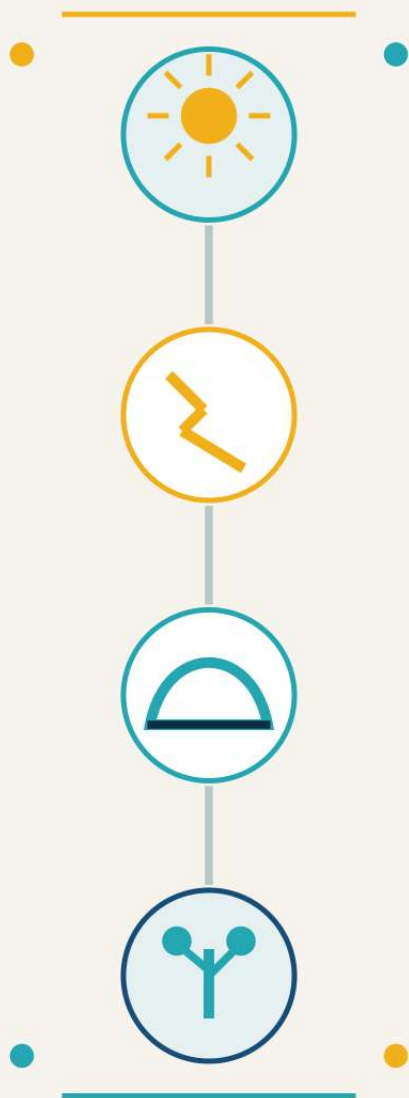
Do we solve the problem for them? Do we interpret frustration as an inability to learn? Or do we provide the right amount of support for them to work through the challenge themselves?

Building better learners does not mean creating students who never struggle. It means helping learners understand that struggle does not have to be the end of the learning process.

Sometimes success is getting the answer right.

Sometimes success is trying again.

And sometimes the most important growth happens somewhere between "I can't do this" and "Let me try one more time."



## NATURE ART SHOWCASE

# BRINGING SCIENCE TO LIFE THROUGH ART

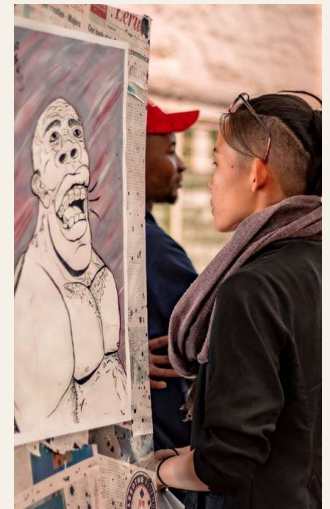
Nature Art Showcase is a hands-on art and STEM enrichment program that helps elementary-age students explore creativity through science and nature. Facilitated by STEM Scholars Servant Leader Interns, the program combines visual arts, biology, ecology, and environmental education.

Students explore animals, insects, marine life, habitats, ecosystems, anatomy, and behaviors through interactive lessons and demonstrations. They then reinforce learning through drawing, painting, sculpting, coloring, and creative building.



### STEM FOCUS

- Biology + Ecology
- Natural Sciences
- Environmental Awareness
- Animal Classification
- Observation + Investigation
- Creative Problem-Solving
- Scientific Exploration

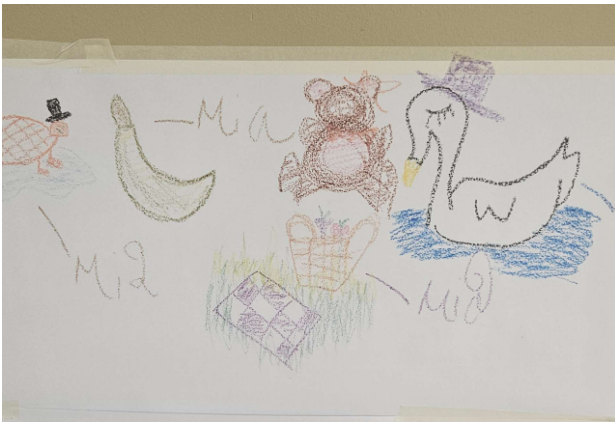


# WHERE CREATIVITY MEETS CURIOSITY

The Nature Art Showcase blends science education with artistic expression, giving young people multiple ways to explore the natural world. Participants observe, imagine, and create while making connections between nature, curiosity, and their own perspectives.

## NATURE THROUGH THEIR EYES

Original artwork created by Nature Art Showcase participants in **Anguilla, Mississippi - Summer 2026.**



ANGUILLA PARTICIPANT ARTWORK



ANGUILLA PARTICIPANT ARTWORK

### SCIENCE + ART + IMAGINATION

Science often begins with observation. Art gives young people another way to communicate what they notice, understand, and imagine. Each piece is different, reminding us that there is more than one way to see and interpret the natural world.

Through art, participants practice noticing details, exploring new ideas, expressing their perspectives, and inspiring others through creativity.



*Small Town.  
Big Potential.  
Brighter  
Tomorrows.*



**Verna Gibbs**

Town Clerk  
Town of Cary, Mississippi

## AN EXCLUSIVE INTERVIEW

# A CONVERSATION WITH Verna Gibbs

LEADERSHIP | COMMUNITY | OPPORTUNITY

Dr. Kevin Epson had an opportunity to speak with Verna Gibbs about the Delta STEM Tour, the importance of hands-on STEM education, and the opportunities available to young people throughout the Mississippi Delta. During their conversation, he asked Gibbs to share her perspective on the program's impact and the importance of exposing young people to STEM.

### 1 What is some of the feedback you've received about the Delta STEM Tour?

I have received positive feedback from participants. I was impressed by the things offered by Community Groomers. All of the kids had a great time. I even had a nephew who was present and he shared that he had a wonderful experience as well.

### 3 Do you believe STEM education is important for young people growing up in the Mississippi Delta? If so, why?

Yes, I do believe it is important. Kids don't know that many STEM opportunities are available near them, and many programs are available in our area.

### 2 What are some of the challenges young people in your community face when it comes to accessing STEM programs, technology, or other educational opportunities?

From what I can see, schools do a good job offering STEM concepts. However, often times, kids don't know that STEM can be fun. They don't have the opportunities that allow them to see that there's a whole wide world that STEM covers, and that they can be a part of that world. Because of this, they miss out on so much. You have to make learning fun to draw kids in. The hands-on STEM experiences that Community Groomers offers with the Delta STEM Tour gives kids the missing hands-on piece, and it is a good program to draw them in.

### 4 What would you like young people from your community to know about the possibilities available to them in STEM careers and education?

In my career, I operate many critical systems at a water treatment plant, and there is a lot of STEM coverage here. Water treatment is present everywhere in the country, and it requires talents from many of the STEM fields - from technical training for safe operations, to scientific training for understanding safe water levels, to engineering and math for understanding how the systems work. We have to strip bad things from water to make sure it does not harm animals, plants, and people. Again, knowledge of STEM can open doors for you.

*“When our children have access to opportunities, our whole community grows stronger.”*

— Verna Gibbs



**STRONGER YOUTH**



**BRIGHTER COMMUNITIES**



**LASTING OPPORTUNITIES**

*Investing in People.  
Building Brighter Tomorrows.*



**HANDS-ON  
LEARNING**



**CURIOSITY  
IN ACTION**



**CREATIVE MINDS  
BRIGHTER FUTURES**

INVESTING IN TODAY. EMPOWERING TOMORROW.

# EDUCATION, TRAINING & SCHOLARSHIP INITIATIVE

The Education, Training, and Scholarship Initiative (ETSI) is designed to expand access to academic, career, and professional development opportunities for youth and young adults in underserved communities.

Grounded in **empowerment, exposure, and equity**, ETSI serves as a bridge between potential and opportunity - helping participants pursue higher education, career pathways, leadership roles, and professional growth.

## S3L INTERNSHIP

Leadership, STEM learning, research, service, and professional development.

## SCHOLARSHIPS

Financial assistance, recognition, mentorship, and support for postsecondary education.

## EDUCATION + TRAINING

College readiness, career exploration, workforce development, financial literacy, life skills, and self-advocacy.

**OVERALL GOAL:** Increase access to higher education and career pathways, develop leadership and workforce-readiness skills, provide financial and mentorship support, and create a pipeline of future professionals committed to community impact.

# CREATING PATHWAYS TO WHAT'S NEXT

## EDUCATION + TRAINING

- College applications and essays
- FAFSA support
- Career exploration
- Resume writing and interviewing
- Workplace readiness
- Financial literacy and life skills
- Mental health awareness
- Self-advocacy

## SCHOLARSHIP PROGRAM

Financial assistance is designed to reduce barriers to postsecondary education for graduating high school seniors and undergraduate students, especially those from underserved or rural communities.

### POSSIBLE AWARD AREAS

- Community Leadership & Service
- Future Educators & Counselors
- STEM & Innovation
- Resilience & Overcoming Adversity

**THE BLUEPRINT:** Education is not a single event. It is a pathway built through information, access, preparation, financial support, mentorship, and opportunities to practice the skills needed for the next step.

## S3L INTERNSHIP PROGRAM

# LEARNING. DOING. TEACHING. STEM.

The STEM Scholars Servant Leader Internship (S3L) is a structured summer experience that combines community service, leadership development, STEM-based learning, research, and professional growth.

The 2026 program is a 10-week, stipend-based internship for high school seniors and undergraduate students. Interns engage in STEM education, research development, community engagement, leadership development, administration, planning, and hands-on facilitation.



### THE S3L MODEL

- STEM Learning - build foundational knowledge
- STEM Leading - teach and facilitate activities
- Administration & Planning - support operations and outreach



# FROM LEARNER TO SERVANT LEADER

S3L interns do more than observe Community Groomers programming. They become part of the work. Interns assist with mission planning and construction for high-altitude balloon activities, facilitate hands-on LEGO learning, support Delta STEM Tour coordination and outreach, contribute to program development, and help teach younger participants.

## MISSION TO THE BLUE

Assist with aircraft construction, mission planning, space-exploration concepts, and participant engagement.

## LEGO CLUB

Facilitate activities, encourage student engagement, and introduce problem-solving scenarios.

## DELTA STEM TOUR

Support scheduling, coordination, marketing, outreach, program development, and facilitation.

## PROFESSIONAL GROWTH

Interns build communication, leadership, research organization, project planning, presentation, and teaching skills while gaining service-learning experience and material they can carry forward into resumes, college, and future careers.

# CREATIVITY IN ACTION

## Creature, Creature! Poster Board

S3L Intern **AmilliaRose Rollins** created this colorful and imaginative poster board for the Delta STEM Tour's **Creature, Creature!** exhibit. The display reflects the creativity that interns brought to the program while helping make science engaging and welcoming for young participants.



"Creature, Creature!" poster board created by S3L Intern AmilliaRose Rollins.

**THE INTERN EXPERIENCE:** S3L interns did more than facilitate activities. They also helped create the visual, educational, and hands-on experiences that brought the Delta STEM Tour to life.

# MEET THE INTERNS

## STEM SCHOLARS SERVANT LEADER INTERNS (S3L) | SUMMER 2026

The STEM Scholars Servant Leader (S3L) Internship gives young people the opportunity to learn, lead, and serve while making a real impact in their communities. This summer, our S3L interns traveled across the Delta supporting the Delta STEM Tour—facilitating hands-on activities, engaging young learners, and inspiring the next generation of problem solvers and innovators.

Meet the Summer 2026 S3L interns and hear, in their own words, what they learned along the way.



From left: Johnquisha Young, Sara-Bellum the Skeleton, AmilliaRose Rollins, and Mayor Linda Williams-Short of Mayersville, MS during the Delta STEM Tour.

## LEARN LEAD SERVE GROW



### LEARN

Gain knowledge, explore new ideas, and build skills.



### LEAD

Take initiative, inspire others, and guide with purpose.



### SERVE

Give back to our communities and make a difference.



### GROW

Build confidence, character, and a brighter future.

### S3L INTERNSHIP:

Developing Leaders.  
Serving Communities.  
Changing the World.

## AmilliaRose Rollins



High School Senior  
Kings Court Christian  
Academy  
Greenville, Mississippi



**We are all  
science!**



Working with the Delta STEM Tour was an amazing opportunity that allowed me to blossom in many different areas—socially, mentally, and personally. I was blessed with the opportunity to travel to different cities across the Mississippi Delta and teach young people about the principles of science and how they can apply them to the world around them.

One experience that was especially meaningful to me was being able to advocate for children around the topic of body positivity. I wanted them to understand that loving and appreciating your mind and body is an important part of learning about science because, essentially, we are all science!

My team and I also worked hard to show communities that we did not want the Delta STEM Tour to be a one-time experience. We want to continue the legacy of teaching young people throughout the Delta—and maybe one day around the world—about the core of science, cool techniques in math, the fundamentals of engineering, and, of course, the world of technology.

Being an S3L intern also taught me how to handle business more professionally and improve my time-management skills. I learned how to work better as part of a team, collaborate with others, and bring our different ideas together to create fun experiences for the kids. I was also able to enjoy and grow in an area of education that I was not particularly familiar with before this experience.

Overall, I truly enjoyed my internship with Community Groomers, and I would recommend the S3L Internship to anyone interested in being part of a project like the Delta STEM Tour.



**We wish to continue the legacy of teaching young people all across the Delta—and maybe one day even the world.**

## Johnquisha Young



College Sophomore  
Mississippi Delta Community College  
Greenville, Mississippi



**Hands-on learning  
can make STEM  
fun, engaging, and  
easier to understand.**



This summer, I had the opportunity to participate in a STEM internship with Community Groomers, an organization dedicated to bringing educational STEM experiences to small communities. Through the internship, I traveled to Mayersville, Anguilla, and Cary, Mississippi, where I helped present different educational exhibits to children.

The program gave me the opportunity to teach young people about anthropology, anatomy and physiology, and critical thinking through LEGO-based activities. Traveling to different communities and interacting with children allowed me to see firsthand how hands-on learning can make STEM subjects fun, engaging, and easier to understand.

Throughout the internship, I also developed skills that I will be able to use in my future education and career. One of the biggest areas of growth for me was becoming more comfortable with public speaking and communicating with different audiences. I learned how to explain information clearly, interact with children, and adjust my approach to keep participants interested and involved.

Most importantly, I had an amazing experience connecting with the youth of the Mississippi Delta and being a positive part of their learning experience. This internship gave me valuable experience, great memories, and an opportunity to grow both personally and professionally.



**I had an amazing experience connecting with the youth of the Delta and being a positive part of their learning experience.**

# MISSISSIPPI

## DELTA IS GOING TO

# SPACE

EXPLORING TODAY. INSPIRING TOMORROW.

The Mission to the Blue program will launch high altitude balloons to the stratosphere — about 30 miles above Earth — to capture footage, collect data, and conduct experiments. This hands-on learning experience gives students the opportunity to explore space systems engineering while developing critical thinking, problem-solving, and teamwork skills.

*“We may be a small community, but our dreams have no limits.”*



### CAPTURE BREATHTAKING FOOTAGE

See our world from a new perspective.



### COLLECT REAL-WORLD DATA

Turn curiosity into meaningful research.



### CONDUCT STUDENT-DESIGNED EXPERIMENTS

Hands-on learning that makes a difference.



### INSPIRE THE NEXT GENERATION

Creating opportunities beyond the classroom.

### STEM TOPICS INCLUDE:

- Atmospheric Science
- Aerospace Engineering
- Data Collection & Analysis
- Environmental Science
- Space Systems Engineering
- Physics & Flight Dynamics
- Technology & Innovation
- Problem-Solving & Critical Thinking

**REAL  
SCIENCE.  
REAL STUDENTS.  
REAL IMPACT.**



HANDS-ON LEARNING



A HIGHER PERSPECTIVE



A BRIGHTER TOMORROW



### MAIDEN VOYAGE: 2027

Our first launch is planned for 2027, and we cannot wait to see where the journey takes us. The Mission to the Blue is more than a balloon launch — it is a chance to show our students that science, exploration, and opportunity are within their reach.

*Let's Reach  
New Heights  
Together!*

**BECAUSE  
THE NEXT  
GENERATION  
DESERVES A  
BIGGER VIEW.**

# PLAN. LAUNCH. TRACK. RECOVER.

Participants become part of a real near-space mission. They launch high-altitude balloons, capture images and video of Earth, design and conduct scientific experiments, explore the atmosphere and ozone layer, track flights using GPS and satellite technology, and collect data.

## AREAS OF EXPLORATION

- Atmospheric science
- Principles of flight
- Buoyancy
- Wireless / satellite communications
- GPS signals
- Gravity
- Pressure
- Temperature
- Density
- Altitude



NEAR-SPACE FLIGHT IN ACTION

## REAL SCIENCE. REAL STUDENTS. REAL IMPACT.

Learning moves beyond the classroom and into discovery.

## INSPIRING FUTURE EXPLORERS

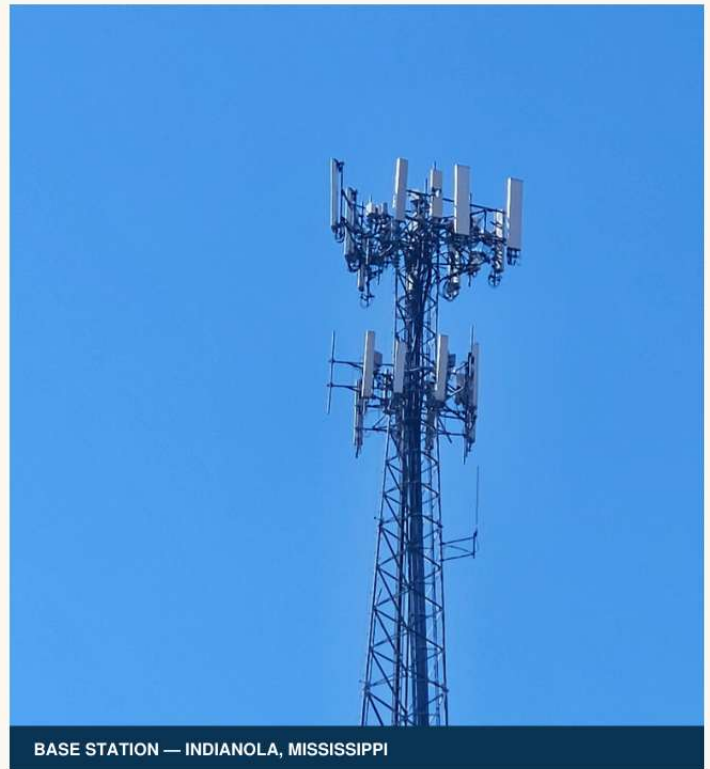
Mission to the Blue shows participants that learning can be an adventure beyond the classroom while strengthening teamwork, critical thinking, problem-solving, and exposure to aerospace, engineering, science, and technology.

*Higher learning. Brighter futures.*

# How Do Cellular Phones Work?

By Dr. Kevin Epton

They seem to be all over the place - in the hands of the older, the younger, and all ages between. **Cellular phones** - or as they are frequently called, "**cell**" phones. Technology has certainly advanced from the days when only professionals had cellular phones; now, they are **ubiquitous** - which means they can be seen nearly everywhere a person may go. But we use them so much that we may forget to stop and ask - "what is this thing?" and "how does it work?". In this article, we will explore just how cellular phones and their various equipment come together to bring you those silly videos, text messages, and games you play; oh, and also how they help you make phone calls too. We will do this by asking questions - lots of questions.



BASE STATION — INDIANOLA, MISSISSIPPI

## Why are they called cellular phones?

The way cellular phones work is pretty cool: there are a few different pieces of equipment involved. First, there is the cellular device - your phone. Since you use this device, it is called "**user equipment**". Your phone, or any user equipment connects to something called a "**base station**". Sometimes, base stations are called "**phone towers**"; they mean the same thing, but the official term is base station.

So here's the scenario: there are several base stations spread out across an area of land. For instance, there may be three base stations spread out across one city, then two spread out across the next town, two in the next, and so on and so forth. When you place a call on your cellular phone, the phone connects to the nearest base station; from there, the base station will do a lot of tricky engineering behind the scenes to connect your call. Well, each base station can only provide service for a small amount of area - this is why we need multiple base stations. The areas that each base station provides service for are called "**cells**"; this is where the name "cellular phone", or "cell phone" comes from. The user equipment and base stations are part of something called the "**radio access network**".

# Base Stations Across the Delta



BASE STATION — GREENVILLE, MISSISSIPPI



BASE STATION — LELAND, MISSISSIPPI

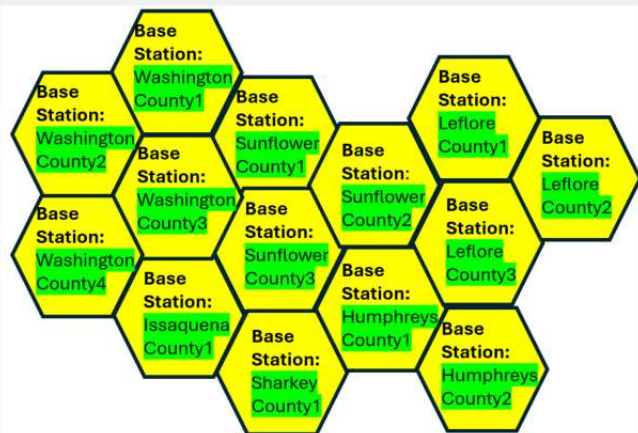
## What happens when my phone leaves the cell?

If you are driving and using your phone, you may leave the cell that your phone is in. Big trouble - right? Not so, thanks to good math and engineering. Each base station is smart enough to know when you are about to leave its cell, so it follows a really tricky process called "**hand off**". With hand off, if a base station detects that a cell phone is about to leave its cell, the base station will talk to the next base station and pass all the connection information over so that the call will not be dropped. This involves lots and lots of calculations, but is done within a split second. You will not even be aware of this while you are talking on the phone!

## How do cellular phones have access to the Internet?

Okay, okay - so the base station hand off is pretty impressive, and I know my phone call won't be dropped. But how do cellular phones handle text messages and Internet access? Good question. Similar to the way phone calls are handled, Internet and text messaging are also handled through the base stations. Remember how earlier we said there is lots of equipment involved in cellular phone operations? Well it turns out, those base stations actually connect to a larger network called the "**mobile core**", which carries all the cellular phone conversations to nearby phone companies and to something called "**data centers**", and then to an even larger network called the "**Internet Backbone**". The Internet is ubiquitous, and this helps cellular phones become ubiquitous as well, which is how you can visit websites and other Internet stops on your phone - if you have an appropriate data plan, of course.

EXAMPLE BASE STATIONS AND CELLS — CENTRAL MISSISSIPPI DELTA



# Keep Exploring

## This is very interesting; where can I go from here?

Now that you have a general understanding of how cellular phones work, you may be curious for more. Good. Here are some things to help strengthen your understanding and further your studies.

- 1) Google "SIM card"; I know you've heard of these before, but find out what they really are and how they work.
- 2) Google "MIMO"; find what they are, and how they relate to base stations.
- 3) Observe a few base stations and MIMOs around town. These are your nearby cells. Your calls switch from base station to base station depending on your location.

Continue to ask lots of questions about how the technology around us works, and until next time - good luck and God bless!

### KEY TERMS

#### **cellular phone**

a device used for mobile communication through special equipment called base stations

#### **ubiquitous**

something that can be seen nearly everywhere a person may go

#### **user equipment**

cellular phone technology operated by customers

#### **base station**

special equipment that connects user equipment to cellular phone services

#### **phone tower**

another name for "base station"

#### **cell**

the special geographical coverage area that a base station provides

#### **radio access network**

the group of cellular phone operations that include the user equipment and the base station

#### **hand off**

an operation where a base station passes all a phone's connection information to another base station so the phone call won't be dropped

#### **mobile core**

a network used to process data related to cell phone and base stations actions; includes connections between base stations, phone companies, data centers, and other service components

#### **data center**

a collection of computer servers used to process and store information

#### **Internet Backbone**

the collection of connections across the Internet used to transfer information around the world

### REFERENCE / FURTHER READING

Peterson, L., Sunay, O., and Davie, B. (2023). Private 5G: A Systems Approach.  
<https://5g.systemsapproach.org/core.html>

**TRY IT YOURSELF!**

# BALLOON ROCKET

**Explore Motion. Discover Possibilities.**

Launch your own balloon rocket and see how science can take things farther than you think!



**BUILD IT • LAUNCH IT • TEST IT • TRY AGAIN!**

## MATERIALS

- 1 balloon (any color)
- 1 plastic straw
- 1 piece of string (10-15 feet)
- 2 chairs
- Tape

## DIRECTIONS

- 1 Tie the string between two chairs and pull it tight.
- 2 Thread the straw onto the string.
- 3 Inflate the balloon, but do not tie it. Pinch the opening.
- 4 Tape the balloon to the straw so the opening points backward.
- 5 Release the balloon and watch your rocket travel!

### BEFORE YOU LAUNCH: MAKE A PREDICTION!

Will a bigger balloon travel farther? What do you think will happen - and why?

### THE SCIENCE BEHIND IT

Air rushing backward creates a force that moves the balloon forward. This is action and reaction - the same basic idea used in rocket propulsion.

### STEM WORD TO KNOW

#### THRUST

The force that pushes an object forward.

### LEVEL UP YOUR EXPERIMENT

Try different balloon sizes or string lengths. Record what changes and see which rocket travels farthest!

# INTERESTED IN CONTRIBUTING?

The Community Blueprint welcomes contributions that highlight **education, STEM, community engagement, youth development, innovation, and opportunities** throughout the **Mississippi Delta**.

## SHARE YOUR STORY.

We'd love to hear from:

- Educators and schools
- Students and young people
- Community organizations and partners
- STEM professionals and innovators
- Leaders creating opportunities in the Mississippi Delta

Contributions may include community stories, program highlights, educational ideas, photographs, reflections, or other content that supports the mission of **The Community Blueprint**.

## CONTRIBUTE TO A FUTURE ISSUE

Contact the Editor-in-Chief

[info@cgroomers.org](mailto:info@cgroomers.org)

Help us continue sharing the people, ideas, and opportunities shaping the Delta.

# ACKNOWLEDGEMENTS

COMMUNITY • PARTNERSHIP • GRATITUDE

In the efforts we have engaged, the Communities we have served, the many hands shaken, shoulders patted, stories exchanged, and earnest intentions shared, the success we have come by has been aided by the stories and contributions of many others. We are "Community" - not individuals. We have reserved this space for the honor of acknowledging some of the contributors aforementioned. We cannot name all names, but please know that we are appreciative of all persons.

To the municipalities who have joined forces with our efforts - to Mayor Evelyn Faye Maxey of Anguilla, MS - we say thank you; to Mayor Linda Williams-Short of Mayersville, MS and Team - we say thank you; to the Town of Cary, MS, its many supporting Members, Ms. Dilvory Carroll, and to Town Clerk Verna Gibbs - we say thank you; to the many constituents of Humphreys County, to Mayor Anissa Fountain of Louise, MS, to the City and constituents of Belzoni, MS, and to Mr. Marvin Jones - we say thank you. To the Boys and Girls Club of Washington County with whom we had the pleasure of presenting the Lego Club - we say thank you.

To the forerunners who contributed a helping hand in staging an introduction here or there, or in using their good name to put in a word of vouching for us so that two Teams may meet and become one Team - to Maggie Netterville, Phenomenal educator with a reach that spans multiple generations and worthy of a page of praise herself - we say thank you; to Danyel Bettis, a good friend with a listening ear who helped stage an introduction at the right place at the right time, not knowing just how it would lead to the blessings of so many others - we say thank you.

To the parents and guardians who have taken a chance with their beloved children and gifted us the opportunity to serve - we say thank you. To the personal advisors, mostly unsung and unknown, yet holders of wisdom and keen insight - insight which contributed in one way or another to some of the work we have presented - we say thank you.

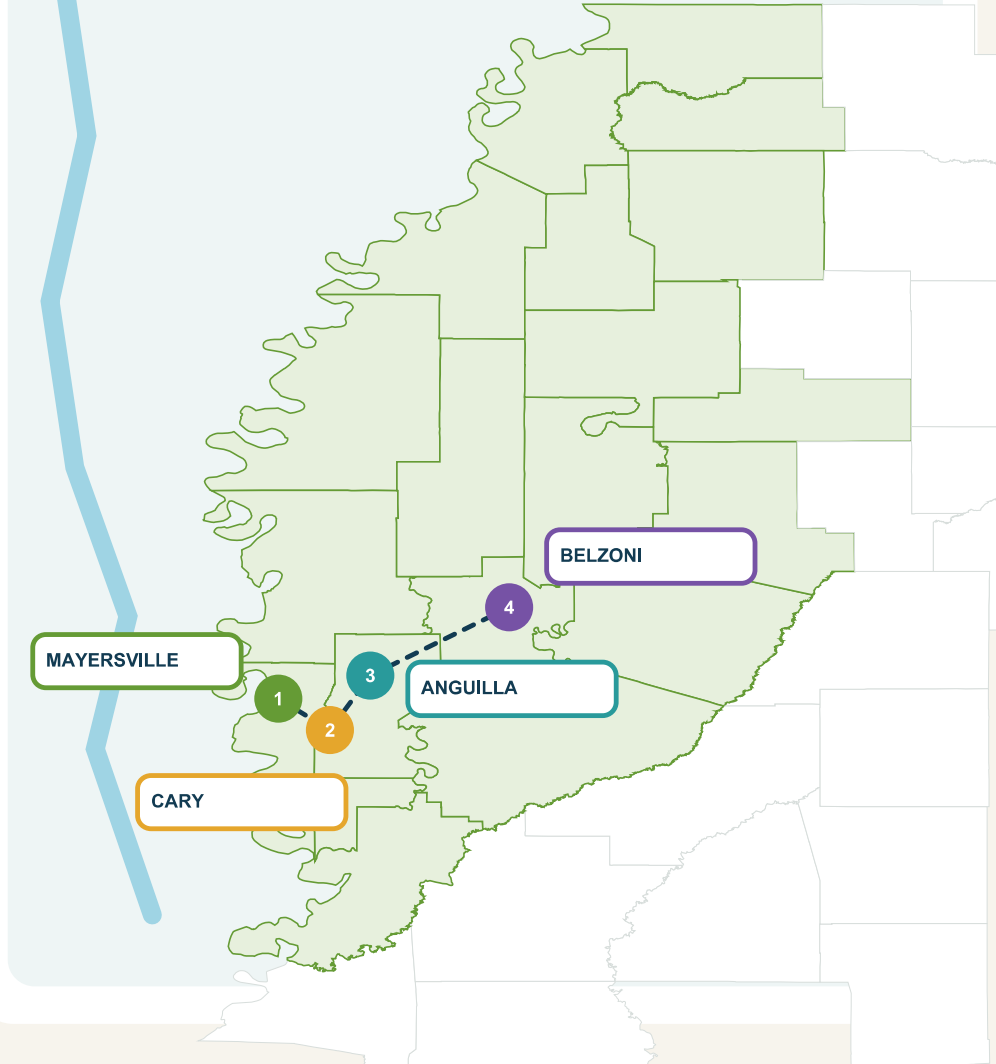
Finally, Community Groomers is nothing if not true to our motto - "apud Deum, pro hominibus, ad cras" - that is, "With God, for people, towards tomorrow". We say - "gratias tibi Deo" - that is, "thank you, God".

*Dr. Kevin Epton, Ph.D.*

# DELTA STEM TOUR TRAVELS

SUMMER 2026 | MISSISSIPPI DELTA

## MISSISSIPPI DELTA COUNTY BOUNDARIES



## 2026 TOUR STOPS

- 1 Mayersville**  
Issaquena County
- 2 Cary**  
Sharkey County
- 3 Anguilla**  
Sharkey County
- 4 Belzoni**  
Humphreys County

## THE TOUR IN MOTION

Each stop brought hands-on STEM learning directly into a Delta community, connecting young people with science, engineering, creativity, and exploration.

## WHY THE MAP MATTERS

The four Summer 2026 stops show Community Groomers moving across the lower and central Delta rather than concentrating programming in one location.

## SUMMER 2026 TOUR SNAPSHOT

### 4 COMMUNITIES

Mayersville • Cary • Anguilla • Belzoni

### 3 COUNTIES

Issaquena • Sharkey • Humphreys

### 1 TRAVELING STEM EXPERIENCE

## BRING THE DELTA STEM TOUR TO YOUR TOWN

Community Groomers can bring hands-on STEM experiences directly to schools, youth programs, community organizations, and Delta communities.

### INTERESTED IN A FUTURE TOUR STOP?

Scan to learn more about programs and partnerships.

ONE DELTA. ENDLESS POSSIBILITIES.



SCAN TO CONNECT