Partner Profile: Alabama STEM Education

Juanita Graham, Founder and Executive Director

Juanita Graham founded Alabama STEM Education in 2014, when contacts at UAB asked her to help bring STEM learning to underserved Birmingham students. Since then she has built ASE into a 501(c)(3) that has served more than 1,400 Jefferson County youth through summer camp, Saturday labs and tutoring. She believes Alabama's young people can lead in STEM careers, and she works every day to open those doors for students who have too often been left out.



Serving Jefferson County Since 2014

Based in Bessemer, Alabama STEM Education brings hands-on science, technology, engineering and math to students across Jefferson County. Its low-cost summer camp pairs STEM labs with at least two exposure trips a week, and Raise the Bar Saturdays and T.A.P.E. tutoring carry the learning through the school year. ASE partners with UAB Engineering, Auburn University, Lawson State, Miles College and the University of Montevallo.

ASE Mission

Alabama STEM Education is dedicated to empowering the minds of underrepresented and underserved youth in science, technology, engineering and math. ASE works to close the opportunity gap and dismantle the barriers students face in preparing for STEM success, through hands-on learning, mentoring, career exposure and a supportive community of families, schools and industry partners.

Target Demographics

Elementary, middle and high school students in Bessemer, Birmingham and across Jefferson County, with a focus on underrepresented, underserved and low-income youth. ASE reaches 300 to 500 students each year.

Core Pillars

STEM Summer Camp

Summer sessions blend hands-on labs with field trips to engineering firms, colleges and the U.S. Space & Rocket Center.

Raise the Bar Saturdays

A 10-week Saturday program in coding, aeronautics, robotics and biotechnology for elementary, middle and high school students.

T.A.P.E. Tutoring

Tutoring And Practical Exposure during the school week, supporting reading, writing and core academics.

Why Families Choose ASE

Access: Low-cost programming so cost is never the barrier to STEM.

Exposure: At least two STEM trips a week during summer camp.

Partnership: University partners, including UAB Engineering since 2015.

Life Skills: Campers practice negotiating, debating and working through disagreements.

Community: A cooperative network of parents, students, businesses and organizations.

Belonging: Color-coded team shirts and camp traditions that keep kids coming back.

How You Can Help

Your support helps ASE keep its summer camp strong and affordable for Jefferson County families. Gifts fund field trips, STEM kits, stipends for local teens serving as junior counselors, and guest engineers who show students what a STEM career looks like. Through its partnership with ASE, Mattison Hall Group supports the camp with a dedicated summer teaching team of background-checked instructors, a camp director, MHG Labs STREAM lab curriculum and staff training, enrichment lab days, and student data, compliance and reporting.





