

STEM ACADEMY FOR DEAF & HARD OF HEARING HIGH SCHOOL STUDENTS

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Eugeina O'Daniel interprets information shared by a NASA scientist at the Huntsville Space & Rocket Center for two students on the field trip.

"SCHOOL'S OUT for summer!" rings as students bid farewell to classrooms, but for youth who are Deaf and hard of hearing (DHH), summer presents unique challenges without communication access. Deaf summer camps have long addressed this need, exemplified by initiatives like the STEM Academy by the Alabama Institute for Deaf and Blind - National Technical Institute for the Deaf (NTID) Regional STEM Center (AIDB - NRSC), catering to high school students who are DHH.

STEM Academy is a condensed version of a program for incoming NTID first-year college students. Gerard Buckley, NTID president and RIT vice president and dean, says, "As part of NTID's national outreach mission, we wanted

to expand STEM preparation for Deaf and hard of hearing students from throughout the nation. We were pleased to have the Alabama Institute for Deaf and Blind become a senior partner as the Southeastern Region NTID Regional STEM Center. Over the past five years, the NRSC at AIDB has provided outstanding STEM-prep activities to hundreds of students, parents, interpreters, educators, employers, and VR professionals. Our research shows that deaf and hard-of-hearing individuals are underrepresented in STEM careers, and through our partnership, NTID and AIDB have sought to change this picture and increase deaf participation in STEM. We are pleased with the progress to date and look forward to future years of collaboration."

STEM ACADEMY FOR HIGH SCHOOL STUDENTS AIMS TO:

- Bridge academic gaps in core subjects like reading, ELA, math, and emotional intelligence.
- Foster American Sign Language (ASL) literacy.
- Cultivate leadership skills.
- Enhance college readiness.
- Spark interest in STEM fields.



STEM Academy
Transition Program
2023 staff and
students visiting the
Huntsville Space &
Rocket Center.

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— Gerard Buckley, NTID president and RIT vice president and dean

Mattea King is standing next to an interactive board showing how her one hand classifier represents a person walking.



The STEM Academy experience may provide some resources lacking in districts with limited social, cultural, and educational resources for students who are DHH to be prepared to transition from high school to postsecondary education. For students attending schools for the deaf or center-based programs, it allows students who are DHH to continue to be surrounded by language over summer break.

Classes are dynamic and led by co-teachers who infuse academics with excitement. Math sessions feature inventive problem-solving exercises and rocket launches while reading incorporates novel studies with deaf characters, complemented by ASL summary videos. Academic progress is celebrated, but the curriculum extends beyond

academics to encompass holistic development. In ASL classes, students explore sign language parameters through interactive activities and video projects, catering to varying proficiency levels. Wellness classes focus on self-esteem, social-emotional skills, and resilience through art and journaling. A notable project involved students transforming dissatisfaction with their artwork into a lesson on perseverance, resulting in personal growth and reflection.

College Readiness is one of the STEM Academy's significant goals. As a sponsor, an NTID recruiter spent an evening with the students, talking about the unique postsecondary opportunities at NTID because it is the first and largest technical college for students who are DHH. Every year the

students attend, they earn a college scholarship to attend NTID. Each year, the program also has a successful Deaf adult share their experience transitioning from high school to college and a career. This year, Raven Sutton from the Netflix show *The Circle* shared her journey to her current career as a social media influencer, including the communication barriers she had to overcome.

The success of the STEM Academy has spurred interest nationwide, prompting states to replicate the program. AIDB - NRSC has collaborated with multiple states to expand its reach, with plans to launch in Florida in 2024. Resources and training are being developed to ensure fidelity to the original program, alongside efforts to sustain support for students beyond the summer months.

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INTO THE PROGRAM AND KICK START YOUR APPLICATION TODAY!



Lynn Dunn explains grammar rule while **Laurie Carter** provides ASL interpretation. **Margie Hutto** is monitoring student comprehension and ready to provide additional clarification in ASL as needed with **Kaneesha Stallworth** ready to provide voicing.