

BRITE Girls Online STEM Practices: Building Relevance and Identity to Transform Experiences | AWARD #2215138

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<https://britesummer.org/>

Project Description

To study the impact of an online platform and curriculum (Brite) designed using an intersectional lens that engages girls in community-building, hands-on activities, and engagement with diverse role models on their STEM identity development as measured through sense of belonging, competence, performance, and recognition.

Key Achievements

In July 2023, we held our first Brite program and had 71 girls from across 9 organizations participate. To prepare for the program, we organized three trainings and equipped 30 educators with curricular resources to facilitate small group discussions and hands-on activities and to support girls in talking with role models.

Based on the research and evaluation results, we plan to create more engagement opportunities for girls with each other and the role models to strengthen the community-building.

The goal for next year is to have 250 girls participate.

Audience & Settings

Audience: Middle and High school girls (ages 13-16), focus on girls from historically excluded groups.

Disciplinary area: Computer science, physical science, engineering

Learning environment: Virtual platform

Access and Inclusion

Equity is key to our project. In year 1, our research and evaluation informed our decisions on improved engagement to increase participation from African American and Latina girls. This finding is influencing our choices for recruitment, curriculum design and platform updates.



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A sampling of projects and reflections shared during Brite Fest, a weekly celebration for the Brite Community hosted by a woman STEM role model.

SciTech Institute

Presenters: Jasmin and Saanvi

Collaborative





Informative




Motivational



CSOs: Christina, Gloria, Jasmin, Kianna, Makayla, Saanvi, Sahiba, Sophia, Valentina
Educator: Eileen

STEM-tastic!



Insights Science Discovery

Inspired in part by the Brite Role models, this week's activities evolved into an exploration of the connection between their STEM and non-STEM interests, and what messages they want to tell younger girls (or their younger selves!). These are some of the results

Her Passion

With wonders in her hands, she discovered,
Within classroom walls, a passion uncovered.

Clicking buttons, coding characters with curiosity,
Belonging to computers, she knew her path was there.

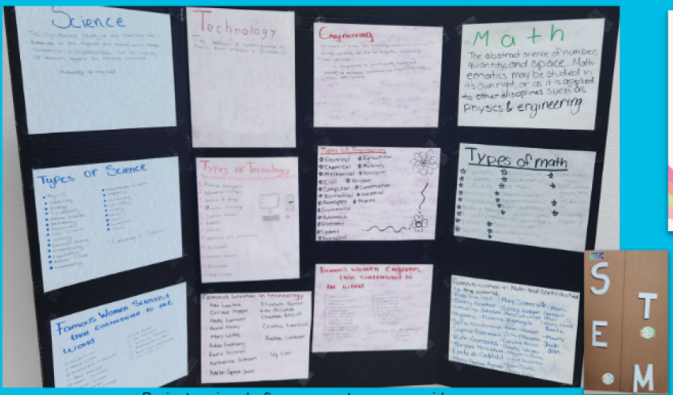
Through downfalls and doubts, she rose above,
The tech-savvy girl, gaining admiration and love.

Like a caterpillar's process, transformation derived,
Towards her goals, she moved, determined and clever.

A journey of discovery, a butterfly's flight,
Her process inspiring, casting darkness to light.

She wishes to become a beacon of innovation,
The tech-savvy girl, prideful and persevered.

Poem inspired by case study exercise




Brainstorming draft, message to younger girls

WOMEN IN STEM

Sensational
Tenacious
Encouraging
Motivated

INSIGHTS SCIENCE DISCOVERY
Beginning of digital version

Ms Camilla C., Ms Yareli G., Ms Anaili V., Ms Gwen R., Ms Vivian G., Ms Elena R., Ms Daniela B.



Williamson County 4-H


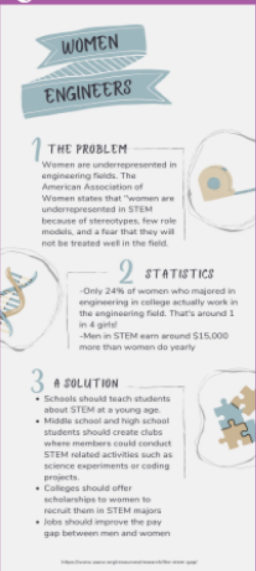
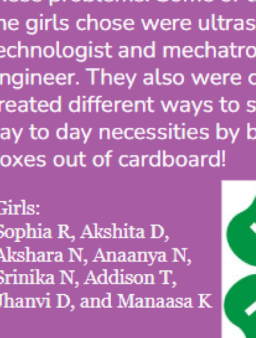



WOMEN ENGINEERS

1 THE PROBLEM
Women are underrepresented in engineering fields. The American Association of Women states that "women are underrepresented in STEM because of stereotypes, few role models, and a fear that they will not be treated well in the field."

2 STATISTICS
-Only 24% of women who majored in engineering in college actually work in the engineering field. That's around 1 in 4 girls!
-Men in STEM earn around \$15,000 more than women do yearly

3 A SOLUTION
-Schools should teach students about STEM at a young age.
-Middle school and high school students should create clubs where members could conduct STEM related activities such as science experiments or coding projects.
-Colleges should offer scholarships to women to recruit them in STEM majors
-Jobs should improve the pay gap between men and women

Girls:
Sophia R, Akshita D, Akshara N, Anaanya N, Srinika N, Addison T, Jhanvi D, and Manaasa K

Girls Scouts of Historic Georgia

We had so much fun being apart of BRITE, and we are sad it is coming to an end. Here are a couple of our projects and some of our favorite highlights from this week (supernova and axolotl). We thank BRITE and all of the women in STEM that took the time to show us that we can do anything we set our mind to. We are all inspired and eager to take all the things we learned and apply them to our STEM journey. Thank you again for such an amazing experience! :) Girl Scouts love STEM!

MARSHES

Marshes are a type of wetland, or low-lying land where water covers ground for long periods of time. Marshes are usually wetlands and dominated by grasses and other activities.

Marshes can reduce erosion, stabilize shorelines, ground against storms, and support species that are critical to restoration and commercial fishing, hunting, boating, and other activities.

The largest swamp in North America, the Okefenokee Swamp covers roughly 700 square miles and is located in the southeastern corner of Georgia.

What are the benefits of marshes in Georgia? A salt marsh extends between the mainland and Sapelo Island, one of the barrier islands along the Georgia coast.





