

2021 Evaluation Findings



A two-week online, interdisciplinary STEM program designed for girls ages 13-16 providing high-quality, online activities centered on collaborative learning with women role models.



Submitted by SJLR Solutions, LLC
January 2022

Brite Core Goals

- Foster STEM identity: belief in self and ability
- Foster STEM agency: decision-making about STEM
- Build a community of girl learners and a support network
- Spark curiosity and creativity

Brite Program Components

- Daily Icebreakers to facilitate activities or conversations
- Daily Independent Activities related to the weekly theme
- Daily Britetalks with women STEM role models
- Weekly Britefests to celebrate the end of each week hosted with women STEM role models

Brite 2021 Weekly Themes

Week 1: July 12 - 15, 2021 - Art x Science

- Focus on the intersection of art and science

Week 2: July 19-22, 2021 - Dream Big, Take Risks

- Introduce girls to audacious careers in STEM

Brite 2021 Participants

- 11 Programs
- 141 Registered Girls

- Arizona State Center, AZ
- Boys and Girls Club of Fitchburg and Leominster, MA
- Doris Dan Kids Campus, CA
- Milwaukee School of Engineering, WI
- Morrison Mentors, NY
- OregonASK, OR
- Penn State University, PA
- SUNY Schenectady County Community College, NY
- The New Tenth Foundation, GA
- University of South Florida, FL
- Williamson County 4-H, TN

Evaluation Methodology

- Documented changes in Brite girls' perspectives, interests, awareness of STEM opportunities, STEM identity, and likelihood of continued STEM participation after Brite.
- Analyzed Brite girls' reflections on memorable program experiences, favorite role models and activities, and STEM topics of keen interest.
- Compared Brite girls' definitions of science before and after the program.
- Recorded existing girls' STEM support systems and communities.



"I am inspired and happy to be part of such a great community of amazing friends, STEAMastic friends." - 2021 Brite girl

76% of the 2021 Brite girls shared information about themselves at the beginning of the program (107 Girls).

25% have someone in their extended family who is in a STEM career

24% have one or more family friends who are in STEM careers

18% have no one in their immediate family in a STEM career

17% have more than one person in their immediate family who has a STEM career

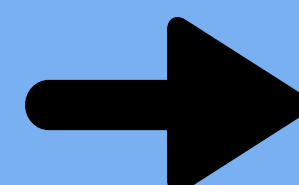
16% have one person in their immediate family who is in a STEM career

Brite girls definition of science evolved to include more dynamic and emotive characterizations of science.

Words to Define Science

Beginning of Brite 2021

- experiments
- problem solving
- fun
- interesting
- data



End of Brite 2021

- amazing
- creative
- adventurous
- inspiring
- curious



2021 Evaluation - High Level Findings



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Brite is a positive experience for the program staff and Brite girls.

- ✓ 100% of the program staff would participant in a Brite program again AND had a good, excellent, or outstanding experience facilitating the program with their girls.
- ✓ 85% of the Brite girls were explicitly positive in the sentiments they shared about their overall Brite experience.
- ✓ Brite girls felt happy when thinking about themselves doing science; evidenced by a 52% INCREASE in their feeling this way from the pre- to post-program survey.
- ✓ By the end of Brite, survey results revealed a 42% INCREASE in the number of Brite girls thinking they are good at science.

Brite fosters STEM Identity and Builds Community

- ✓ 79% of Brite girls' comments expressed that they learned something new.
- ✓ Brite girls felt more confident in their enjoyment of STEM subjects. Survey responses recorded a 64% DECREASE in their feeling unsure about STEM at the end of the program.
- ✓ Brite girls reported knowing more people who are also interested in science than when they started; evidenced by a 67% INCREASE from pre- to post-survey results, and collected comments referring to others with similar interests.

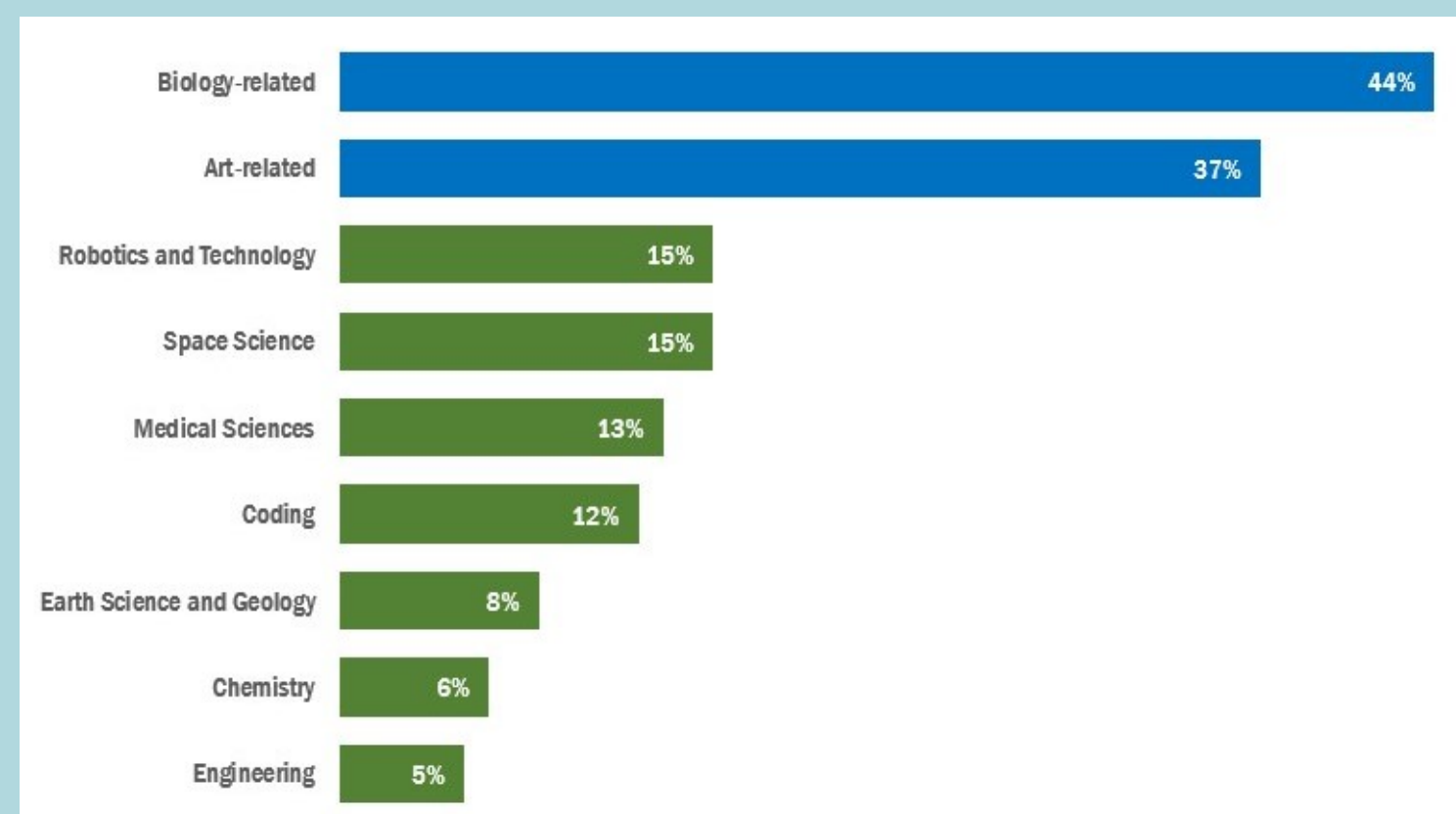
Program staff shared examples of how the girls demonstrated increased belief in themselves in STEM, supported one another, and built community.

- "[The girls] cheered each other on, complimented each other, pointed out each other's strengths."
- "[The girls] created a group chat, planned a social outing for after Brite, [and] worked together to create the BriteFest presentations."
- "We shared a lot of personal stories of struggle, and naturally these girls supported one another and shared there own stories as a way to say 'hey, you're not alone and I understand what you went through.'"
- "Discussion seemed really valuable, [they] shared a bit about their insecurities or not feeling they were able to do certain things like art, science etc."

Brite fosters STEM Agency and Sparks Curiosity and Creativity

- ✓ 88% of the Brite girls reported liking STEM and thinking that "STEM is Cool" at the end of the program, with only 2% of the remaining 12% still not really liking STEM.
- ✓ 57% of the Brite girls' comments specifically addressed their increased awareness of career options and opportunities available to them in their pursuit of STEM interests and career.
- ✓ 43% of the comments shared by the Brite girls showed increased curiosity about STEM topics.

Biology and art were the top selected STEM disciplines and subjects that Brite girls reported wanting to explore further.



During the Brite program, program staff observed girls asserting new levels of confidence, expressing enjoyment, being creative, and identifying new interests.



■ # of Program Staff out of 16 Survey Respondents

Examples of evidence shared to support these observations include:

- girls, who initially self-proclaimed social and performance anxiety, volunteered to speak on behalf of their group at Brite Fest and share their work
- girls openly shared with one another, and supported one another, about gender identification, loss and trauma, personal interest, fears, and accomplishments
- girls discussed interests in topics they had never thought about before
- girls used the Brite platform in their free time to further explore topics and activities



2021 Evaluation



Program staff shared feedback and recommendations.

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16 staff from the 11 participating programs completed the Group Educator Survey at the culmination of the program.

- ✓ 100% report they would participate in a Brite program again in the future.
- ✓ 100% were satisfied or very satisfied with the amount of communication with the Brite team throughout the program (81% very satisfied / 19% satisfied).
- ✓ 94% stated they had enough information to confidently lead their Brite group through each of the weeks.
- ✓ 79% reported that both weeks were manageable.
 - Of the other 21%, 14% noted that the Art x Science week materials were most challenging, and 7% felt neither week was manageable.

All group program staff reported they agreed or strongly agreed that Brite program prepared them for guiding their groups through the program.

The Educator Guide was helpful.	15 of 16 program staff
The Educator Orientation Zoom Meeting was helpful.	12 of 16 program staff
The Platform Orientation Meeting was helpful.	12 of 16 program staff
	■ # of Program Staff who Strongly Agreed
The responsibilities for being a Brite group educator were clear.	13 of 16 program staff
The icebreakers, independent activities, additional resources, and Brite@Home activities were manageable.	12 of 16 program staff
The amount of time I expected to spend on Brite programming and facilitation was appropriate.	11 of 16 program staff
	■ # of Program Staff who Strongly Agreed

Although group program staff felt prepared in the above areas, they reported the most discomfort navigating the Flipgrid (5 of the 16) platform.

Select Quotes from 2021 Group Program Staff Survey Responses



- "We can definitely see the improvements based on our feedback [from last year]. EXCELLENT JOB Brite Team!"
- "We really appreciate the opportunity to keep learning, inspiring, empower young girls and connecting as community!"
- "The Brite Talks were energetic with the most participation I've seen from students since the pandemic hit!"
- "Thank you for creating this opportunity for girls to have a safe, comfortable place to explore the world and be themselves!"

Program staff offered feedback about successful components they recommend to keep for future Brite programming, and ideas to change or improve.

Keep and Continue

- The Educator Guide was very helpful and clear.
- The amount of content.
- The daily summaries posted in Edmodo were appreciated and helped in group organization.
- The 4-day week.
- The breadth of materials and resources.
- Opportunities for program groups to engage with one another.

Add, Change, or Improve

- Add cost-efficient activity recommendations to enhance activities.
- Have two sets of activities for each day that are adapted for younger and older groups.
- Offer a Spanish version of the Brite program.
- Schedule a check-in meeting for program staff and group leaders to meet with Brite team at a mid-program milestone.
- Include Edmodo and Flipgrid platform instructions in the Educator Guide.
- Offer additional prompts for the ice-breakers and activities that help program staff specifically support girls' who may be dealing with varied issues of depression, anxiety, suicide, drugs, and possibly teenage pregnancy and want to continue exploring opportunities to be a woman in STEM.



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Brite evaluation conducted by SJLR Solutions

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