

## Project Goal

The goal of this two-year project is to examine systemic issues within learning spaces and provide educators with anti-racist approaches that validate and uplift Black learners.

Through a combination of media, educator and role model professional development, and intentional outreach, *Black SciGirls* will create more gender-equitable and anti-racist informal STEM learning environments for Black girls.

# Black SciGirls!

## Investigating a Culturally Responsive PBS Media-enriched Approach to STEM Teaching and Learning

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### Role Model Videos

Featuring a PBS series of short-form role model videos of early-career Black STEM professional women to inspire girls to consider STEM careers, directed by Black women.

- PBS KIDS Role Model Video Series
- PBS Special, Black Women in STEM



### Professional Development (PD)

**Educator PD (24 Informal Educators):** Training designed to help educators plan and facilitate SciGirls STEM activities with a gender-equitable and anti-racist lens.

**Black STEM Professional Women PD (24 Role Models):** Training designed to empower role models to be positive STEM role models for Black Girls using best practices.

### STEM Education Partners

- Black Girls Do STEM, MO
- Brown Girls in Tech, GA
- CommunityCode, SC
- Marion P. Thomas Charter School, NJ
- Morrison Mentors, NY
- Mott Halls Bridges Academy, NY
- Park Forest-Chicago Heights School District, IL
- Project Scientist, MN
- Self-eSTEM, CA
- SheWill, GA
- Techbridge Girls, CA
- YMCA of Metropolitan Washington, D.C.

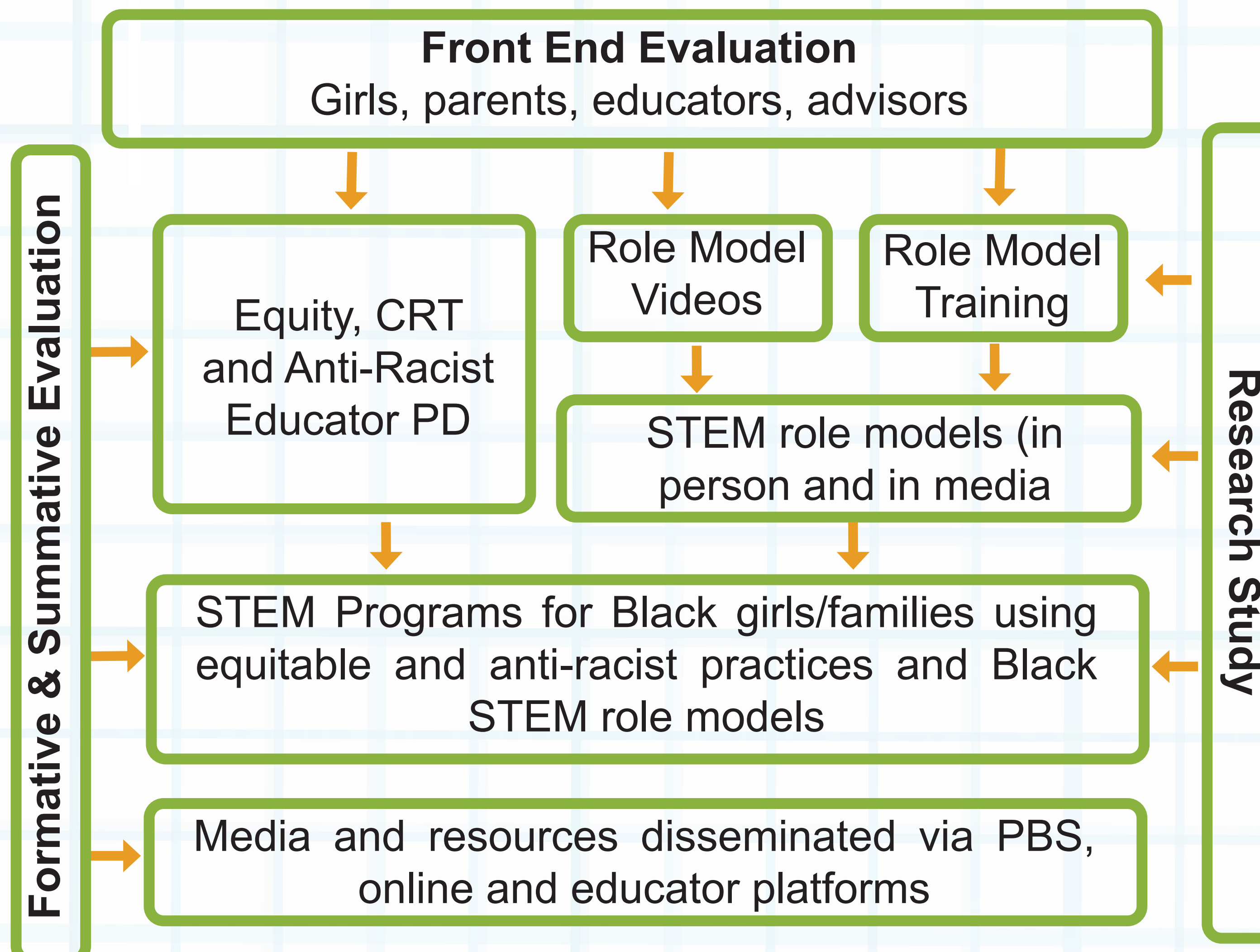
### STEM Outreach Programs

*Black SciGirls* programs at 12 partner sites will include:

- 32-hour informal STEM program reaching 180 Black girls and their families
- *SciGirls* STEM activities and guide for using role models and videos
- Black STEM women professionals engaging with girls as role models (in-person and virtually)

### Research Study Questions

- 1) How and in what ways do Black STEM women role models influence Black girls' interest in STEM?
- 2) How and to what extent do role models report changes in their confidence and ability to engage girls in STEM as a result of training?
- 3) How and to what extent are parents engaged in supporting girls' involvement in STEM as a result of the participation of role models?



### Summative Evaluation Questions

- 1) How does educator use of the *Black SciGirls* collection of resources relate to changes in Black girls' interest in and motivation to pursue STEM studies and career pathways?
- 2) How did participation in *Black SciGirls* PD change educators' perceived self-efficacy and confidence in engaging Black girls in STEM including the design of an inclusive learning environment?
- 3) How has interest and motivation to pursue STEM careers changes among Black girl participants and their families after participation in the *Black SciGirls* outreach program?

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