



# Roads Taken: A Retrospective Study of Program Strategies and Long-term Impacts of Intensive, Multi-year, STEM Youth Programs | Award # 1906396

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## Project Description

The Roads Taken project brings together representatives from long-standing youth programs, experts in out-of-school-time youth programming, and researchers to collaboratively explore the long-term (15-25 years) impact of STEM-focused, intensive (80+ hours/year), multi-year programming.

## Key Achievements

A comprehensive model has guided SEM, fsQCA, and qualitative analytic modeling to reveal multiple pathways to adult STEM involvement (identity, career, personal, and community). Careers are both directly STEM and STEM-adjacent. We have also identified long term follow up challenges of methods, and data management.

## Audience & Settings

### **Audience:**

STEM Youth Program Designers and Staff Members, Researchers/Evaluators Funders, Employers

### **Disciplinary area:**

Youth Development Programs

## Access and Inclusion

A finding: These programs contribute well to STEM pathways of under-represented youth entering with academic prowess and STEM identity; however can be the sole pathway to STEM involvement for youth entering without STEM identity or academic achievement.



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**QUESTION 1**

To what (short-term and longer-term) participant outcomes did the programs contribute? What were the causal pathways?

**QUESTION 2**

What program strategies affected the level and type of program impact?

**QUESTION 3**

How did additional contextual factors in the lives of youth (mesosystem, exosystem and macrosystem elements) influence the nature and level of impact?

**QUESTION 4**

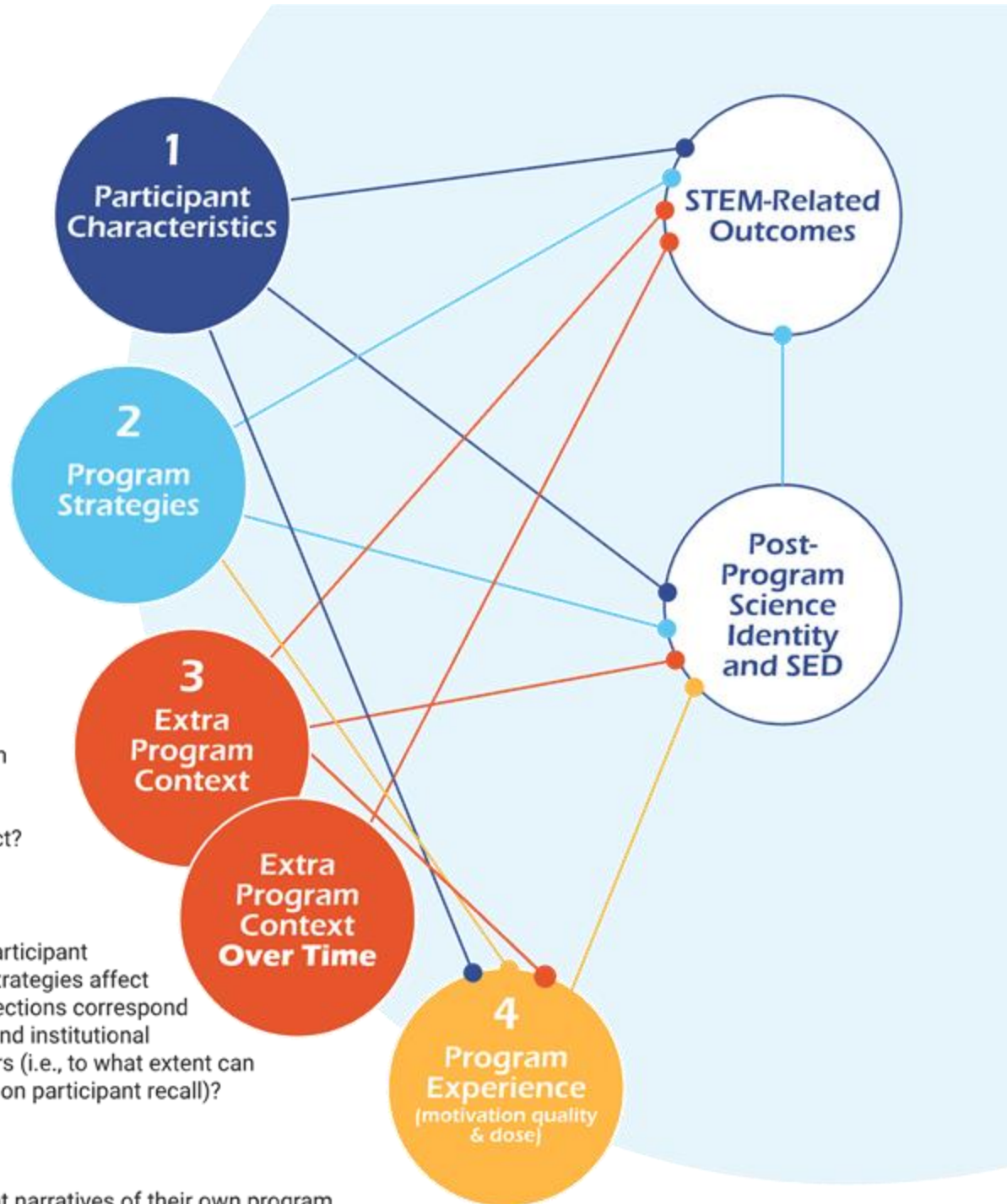
To what extent did the participant experience of program strategies affect outcomes and did recollections correspond to the program records and institutional memory of staff members (i.e., to what extent can future studies rely solely on participant recall)?

**QUESTION 5**

What were the participant narratives of their own program experience and impact as they moved into their adult lives?

**QUESTION 6**

In what ways did the program prepare participants to navigate multifold challenges from worldwide pandemic, economic instability, and racial justice issues?



To learn more about the project and our research, visit <https://tinyurl.com/RoadsTaken>