



Challenges of Youth Programming Long-Term Follow-up:

Exploring Collaborative Solutions



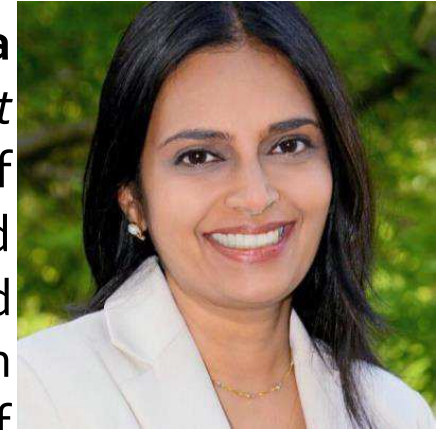
This material is based upon work supported by the National
Science Foundation under Award # 1906396.
And the
Institute of Museum and Library Services MG-25794-OMS-25



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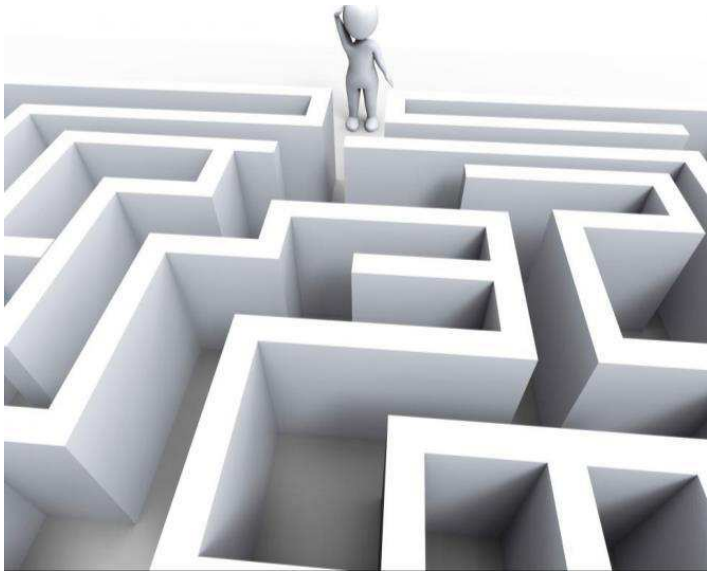
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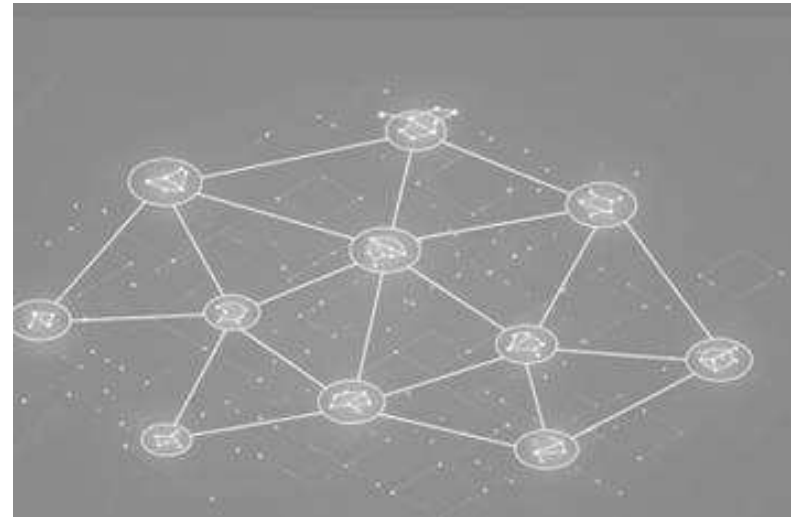
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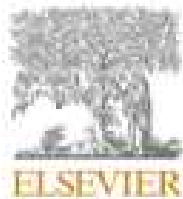
Today's Discussion



The Challenges



**Collaborating to
meet them**



Contents lists available at ScienceDirect

Journal of Applied Developmental Psychology

journal homepage: www.elsevier.com/locate/jappdp



Advancing a collaborative network toward equitable STEM pathways in intensive youth programs

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ARTICLE INFO

Keywords

Adolescents

STEM career pathways

Network

Informal learning

STEM learning

Social-emotional learning

ABSTRACT

Intensive youth STEM programs serve high school students in informal learning spaces such as museums and community centers. They engage participants over weeks, months, or years, focusing on long-term STEM outcomes, especially for populations historically marginalized in STEM fields. However, many of these programs operate independently or in silos, limiting opportunities for collective learning and improvement. Isolation is driven by factors such as diverse organizational types, funding sources, program sizes, content focus, and research and evaluation capacities. Furthermore, conducting longitudinal studies to track participant outcomes is rare and expensive. To address these challenges, this paper proposes a conversation toward the establishment of a collaborative network to support research collaboration and knowledge integration, exchange, and translation. Such a network would strengthen the capacity of these programs, improve long-term outcomes for participants, and contribute to the broader STEM education and career research community, enhancing the overall impact of intensive youth STEM programs.

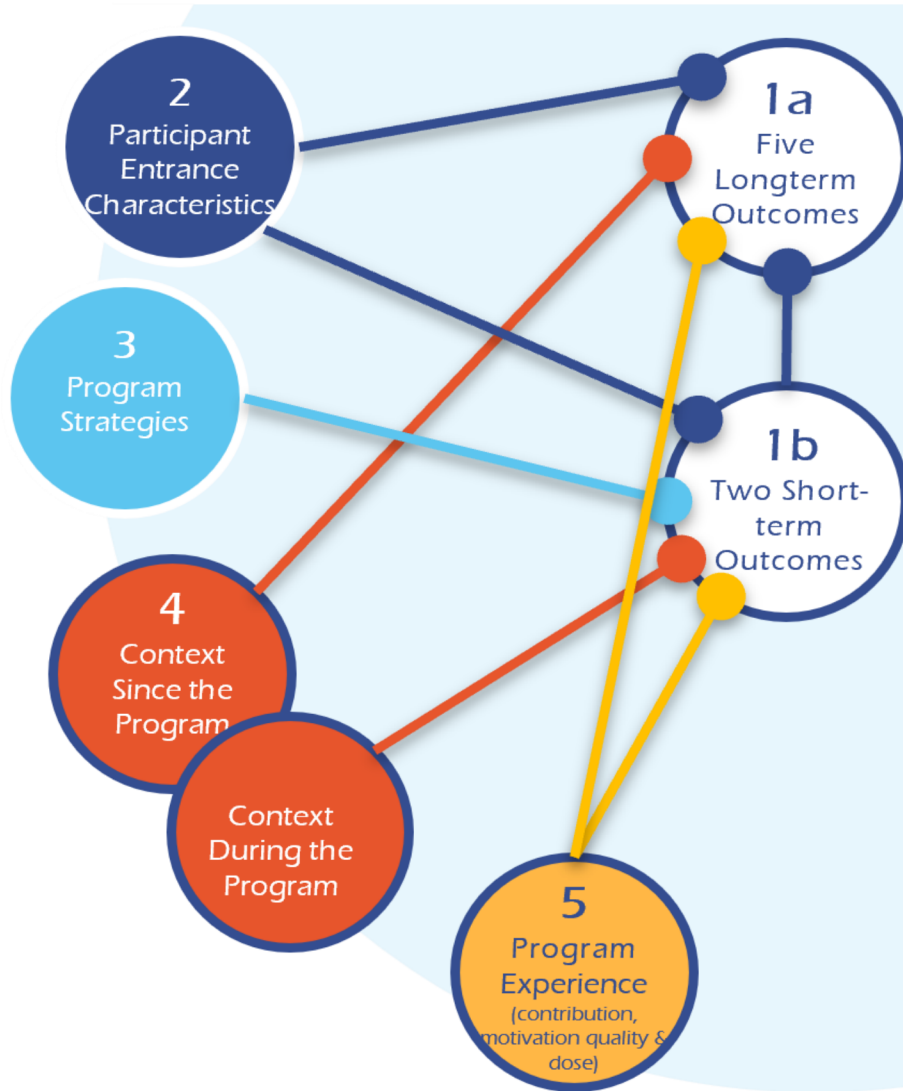
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Challenge #1. Locating & Inviting Alums

Response Rates and Other Percentages	Count	Percent
Located	434 of 1812	23.95% of program records
Contacted	378	87 % of located
Starting Questionnaire	287	76 % of contacted
Completing at Least 75%	196	68 % of started
Submitting Resume or LinkedIn	118	31% of contacted

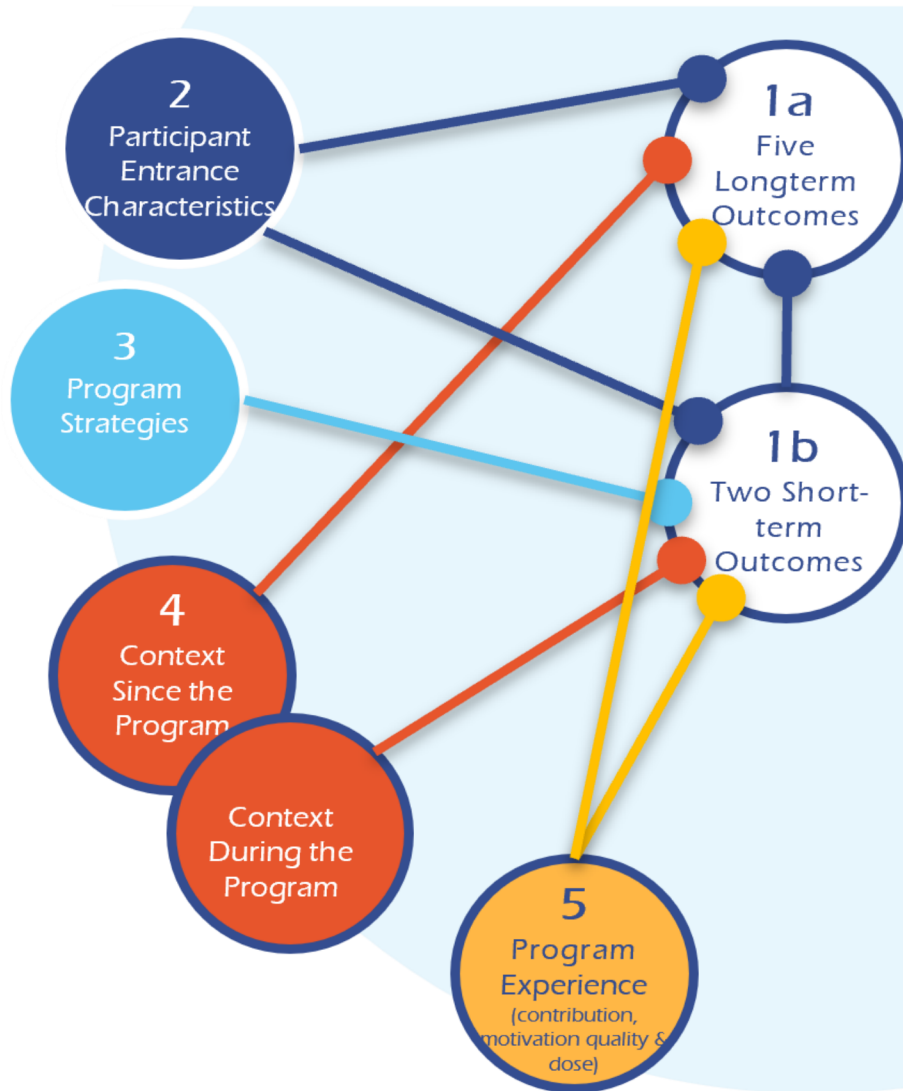
- Data sleuthing
- Data collecting & management
- Data collection training
- Incentives
- Maintaining contact (events, networks, mentoring, philanthropy & volunteering)

Challenge #2. Conceptual Models and Generating Questionnaire Data



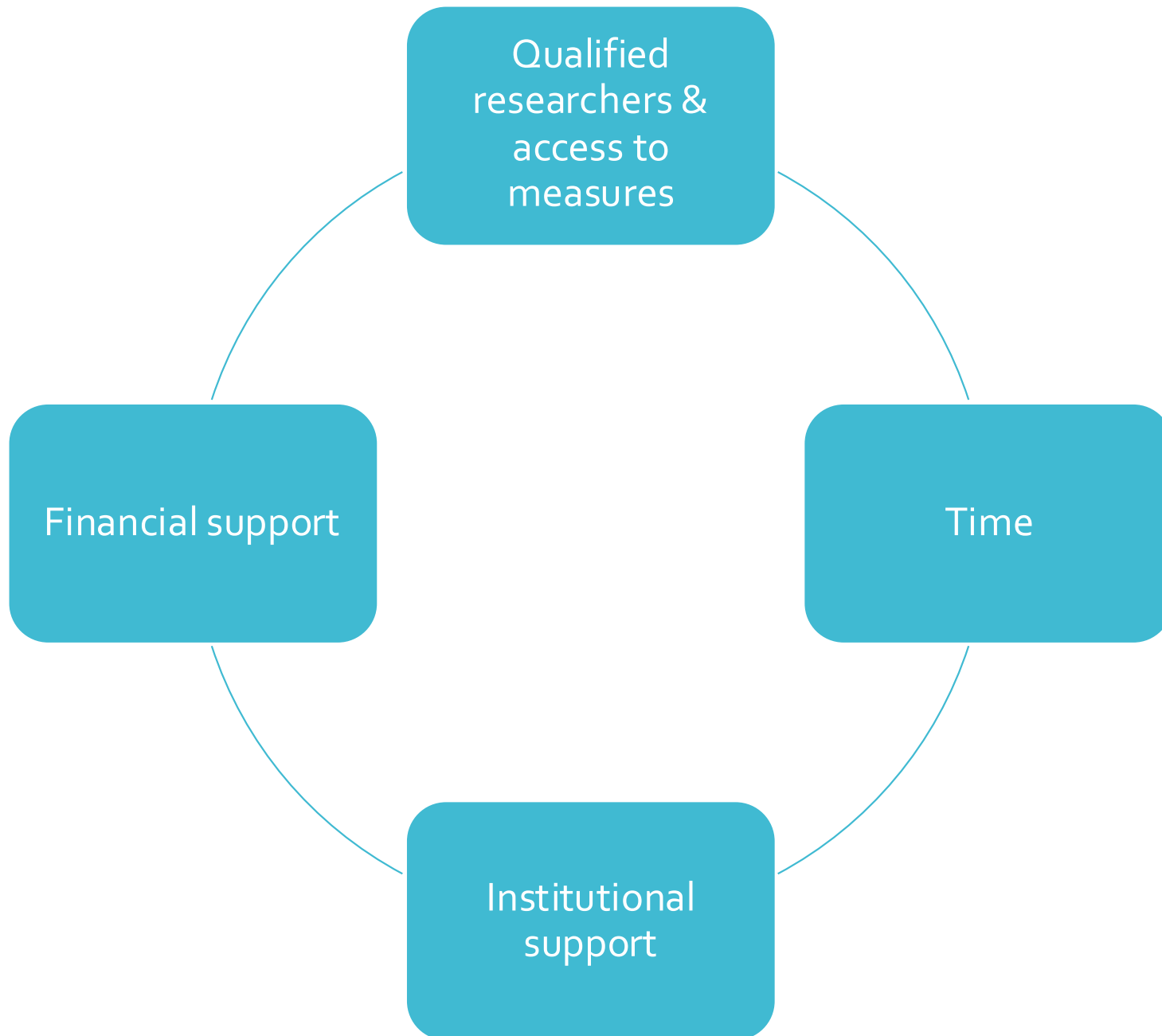
- Model components
- Outcomes
- Measures
- Questionnaire length

Challenge #3. Data Analysis



- Response bias
- Choosing & Using Methods:
 - Descriptives
 - Inferential Statistics
 - Qualitative analysis
 - Contribution analysis through Qualitative Comparative Analysis (fsQCA)

Challenge #4. Resources



Challenges

- Locating & Inviting Alums
- Developing a conceptual model and a questionnaire that follows
- Defining Intended Outcomes
- Data analysis
- Generating financial resources
- Generating research expertise
- Other

Poll

Considering the program you know best, Please rank the following challenges to conducting follow-up research.

Challenges

- Locating & Inviting Alums
- Developing a conceptual model and a questionnaire that follows
- Defining Intended Outcomes
- Data analysis
- Generating financial resources
- Generating research expertise
- Other

Discussion

What are the specific challenges you face and how might collaboration help address them?

https://docs.google.com/presentation/d/1M8IYIGeKqX8MzUoJviajRSv-uifoDj3h/edit?usp=drive_link&oid=112059323160717708966&rtpof=true&sd=true