Please sit at the table with your region.
Roads Taken: Youth Programs Paving the Way for Diversity Mapped by YouthALIVE!

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Moderator:
Priya Mohabir, Vice President of Youth Development, New York Hall of Science

Presenters:
Neal Ramus, Associate Director of Youth Engagement, California Academy of Science—*Long Term Research*
Kathy Johnson, Youth Education Director, Chicago Botanical Garden—*Networking*
Marcia Bueno, Manager of Explainers, New York Hall of *Science*—*Program Changes Over Time*

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Overview

Legacy of YouthALIVE! (Sneider & Burke, 2011)

1990  2000  2010  2020

Roads Taken  Legacy of YouthALIVE!
History of YouthALIVE!

Phase 1
1991-1995
45 institutions

Phase 2
1995-1999
31 continue and 27 join

1991 Network begins - professional development meetings \twice annually

1999 Five regional Networks are established

Core Principals
Roads Taken Project Theory

Legacy of YouthALIVE! (Sneider & Burke, 2011)

Youth Program Representatives
OST Experts
Researchers

Roads Taken Conference → Program Profiles → Searchable Program Database

Institutional Legacy Research
Long-term Participant Impact Research
Reinvigorated Network

Searchable Program Database
Program Profiles
Roads Taken Conference

Youth Program Representatives
OST Experts
Researchers

Institutional Legacy Research
Long-term Participant Impact Research
Reinvigorated Network
Online Conference: Institutions and Organizations Represented

Youth Programs
- California Academy of Sciences, CA *
- California Science Center, CA *
- Center for Aquatic Sciences, NJ **
- Chicago Botanic Garden, IL *
- Museum of Science, Boston, MA *
- Museum of Science and Industry, Tampa, FL
- Natural History Museum of Utah, UT **
- New York Hall of Science, NY *
- Orlando Science Center, FL *
- Science Museum of Minnesota, MN *

Advisors & Leadership Team
- Afterschool Alliance, DC
- Allen & Associates, ME
- Association for Science-Technology Centers, DC
- Center for Aquatic Sciences, NJ
- Insight for Learning Practices, MO
- MEM & Associates, VT
- National Institute on Out-of-School Time (NOIST), DC
- Orlando Science Center, FL
- Portland State University, OR
- Tisdal Consulting, MO
Conference and Program Profile

Program Profile
General Information
Facts
Strategies
1. Youth Engagement Strategies
2. Learning Strategies
3. Authentic Work
4. Leadership
5. Relationships
Organizational Strategies
1. Partnerships
2. Professional Development
Program Descriptions
1. Current Snapshot
2. Guiding Philosophy
3. Short-term Impacts
4. Long-term Impacts
5. Funding History
6. Program Life Cycle
7. Program Assets
8. Program Challenges

Webinar 1, October 28, 2017

Webinar 2, November 18, 2017
Priorities—Post Conference
1. Long-term impact on participants—identifying funding and organizational partners
2. Network and sharable database
3. Institutional research

Discussion Groups
1. Do you think this project and the priorities will benefit your program?
2. Network participation?

Action
Do you want to join the journey?
Look familiar?
Overwhelmed?
“The longest journey starts with a single file folder..” - myself
**Impacts and Outcomes**

In 2016, we surveyed alumni from the past 20 years of the program. Our goal was to measure the impacts of the program. Here’s what we found.

**Higher Education**

98% of alumni enrolled in a college or university after high school. 90% of alumni earned a college degree. Of those who graduated college, 61% graduated with a STEM related major.

Alumni are nearly 3x more likely to declare a STEM major than the national average for all STEM majors.

**Awarded College Degrees**

- 1.4% Decline to State
- 8.6% Some College
- 21% Associate's
- 87.9% Bachelor's
- 30.4% Master's
- 5.5% Ph.D. or Professional

**STEM Careers**

Of the alumni who are post-college, 70% have or have had a STEM related career.

- 19% Medicine
- 28% Research
- 25% Applied Science
- 28% Science Education

STEM Industries Breakdown
ny sci

DESIGN MAKE PLAY • New York Hall of Science
Science Career Ladder
A Walk Through Time: 1986-Present
**SCL Beginnings**

**Core YA Strategies**
- Paid Position
- Communication Skills
- Science Knowledge
- Facilitation Skills
- Youth Leadership Development
- Mentoring (Adult & Peer)

**Expanding Audience**
- Core YA strategies
- Volunteer Role
- After-school Science Club
- Pipeline into SCL program

**Career Development**
- Core YA strategies
- Mentorship & Career Development
- Exposure to STEM Careers
- Residencies and Enrichment Programs

**Transition to College Career Pathways**
- Core YA strategies
- Core Career Development strategies
- Youth Advisory Council
- Partnerships w/ Professional Orgs.
- Alumni Tracking & Program Evaluation

**Timeline**
- 1986
- 1997
- 2011
- 2015-present
Alumni Spotlight: Valeria Aucapina

- Kids Club
- Club Captain
- Volunteer/Intern
- Explainer
- Resident
- Mechanical Engineering
A Case for Networking  
(Even When You Don’t Fit the Mold)
Youth Development Takes Different Forms
From High School to College

Ramsey (REU student) working with Peter (College First) in the soil lab.
From Program to Program

Erica: College First to REU to Doris Duke Conservation Scholarship
From College to Graduate School

Shayla is an environmental consultant for legal cases

Deisi published her first scientific research paper
Hiring Program Participants Back!

Marisol as Science First Assistant

Marisol as Science First Instructor
What Can We Learn from Each Other?
Round table discussions with your region.
Lightening Report Back
Session Summary
Next Steps
References

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Cascading Influences: Long-Term Impacts of Informal STEM Experiences for Girls by
McCreedy & Dierking (2013):
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