**Evaluation Report for**

**“Roads Taken” Youth Programs Virtual Conference**

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**Background**

Funded by the NSF AISL program, The Roads Taken virtual conference was the first of a three-phase participatory research project designed to confer, map, and explore the long-term impact of STEM youth programs. Using ASTC’s innovative YouthALIVE! Initiative as an exemplar, the Roads Taken project hopes to contribute to the understanding of the long-term impacts of such programs (i.e., 10 to 25 years after participation).

**The virtual conference**

The virtual conference involved two webinars (held on 10/28/16 and 11/18/16). The goal was to engage youth program practitioners in the development and testing of a Program Profile prototype, a structured document that helps institutions to characterize their own youth programs in ways that that should be useful to future researchers and practitioners. Between the two webinars, pairs of representatives from participating organizations completed the document by providing descriptions of their current and past program designs, program changes over time, reasons for such changes, and various other descriptors.

**Survey and analysis**

Following the webinars and the completion of the Program Profile by each organization, participants were asked to complete a brief survey (see Appendix). The survey was designed to inform the revision of the Program Profile, by finding out how onerous the process was, whether it offered benefits to those completing it, and whether there were components that should be added, further clarified, or otherwise improved. The survey also gave participants opportunities to share their own beliefs about the critical aspects of their own programs that led to success or limitations; these will be used in the design of research during the later phases of the Roads Taken project.

The survey was administered using SurveyMonkey to 21 conference participants from 10 institutions. While almost all participants had worked in pairs to complete the Program Profile for their institution, the survey was administered to individuals and responses were anonymous. Because of the small samples, statistics are limited to descriptive rather than comparative, and textual responses are listed verbatim.

Many questions were Likert scales, with 1 being the most negative response, 4 being a neutral response, and 7 being the most positive response. In cases where the statements themselves were phrased as negative, the responses were reverse-coded so that in every case (below) the results show more desirable responses as having higher numbers.

To simplify the analysis of Likert scale questions, we combined the numbers of respondents who gave the two most positive responses (i.e., people rating their view as 6 or 7 on a scale from 1 to 7) and called them “people who gave a very high rating.” This is the variable reported out in the charts below.

**Results and discussion**

1. **Participants’ feedback on the webinars**

Most of the 18 survey respondents gave very high ratings to the two webinars, particularly the quality of facilitation and the speakers. Impressively, they were also very positive about the video and sound quality, despite being in a videoconference with 30 people. This is a testimony to both the effective content of the webinars and the power of the videoconferencing platform used.

The only slight weaknesses were the ice-breakers (very highly rated by only half of the participants) and the clarity of future roles of participants. (highly rated by less than half).

1. **Participants’ perspectives on the Program Profile**

Overall, each organizational pair reported taking a total of 0-10 hours to complete the Program Profile, with the most frequently reported times being 3-6 hours.

Respondents reported that most of the information was very easy to obtain. The exceptions were: total number of youth served since the program began, and the detailed strategies used in the original YouthALIVE! program.

**Q5. Additional information respondents would find useful**

Respondents listed several categories of additional information they would find useful:

Funding and financial:

* *Current program funding sources*
* *Funding structures and sources*
* *Funding for programs, specifically is programs are funded through unrestricted institutional support, rather than grants*
* *It would be helpful in benchmarking our program to know how much of each program's budget is spent on participant payroll.*
* *Cost per participant (including AND excluding teen pay/stipend)*

Alumni engagement:

* *Methods for keeping alumni engaged*
* *Alumni engagement strategies*
* *I'd also be interested in hearing about how other programs keep up alumni relations.*

Relationships beyond the program:

* *What relationships other staff members in their museums have with program participants*
* *How other programs locate and use community partnerships - specifics.*

Miscellaneous

* *I'm also a little interested in learning more about the demand for other programs. We often have over 150 applicants for 18 positions (which is really more like 7 positions, once you take into account "returning interns" in our career ladder who are keeping their position). Is that acceptance rate standard? Or is our demand abnormally higher than our supply?*
* *How other programs address barriers for participation (program is free, transportation, food, provide materials, bi-lingual materials etc.)*
* *Measurements of "success,"*
* *Tracking tools/databases*

**Q6. Likely search-phrases for other programs**

When asked to name 3 short phrases they might use to find information about another program, respondents came up with a surprising variety of terms, yet all were focused on the youth programs as a whole, rather than narrowing the focus to specific components they might be interested in.

|  |  |  |
| --- | --- | --- |
| science internships for youth | science experiences for youth | STEM programs for youth |
| teen workforce development and funding sources | career and college readiness | youth leadership |
| Youth | Teens | STEM |
| informal science education | teen programs | high school internships at science museum |
| youth development | at risk youth | science literacy at risk youth |
| Museum Youth Programs | Underserved Youth Programs | Youth Programs |
| Youth enrichment programs | teen service learning programs | youth skill building programs |
| youth development | peer mentor | teen programs |
| teen/youth development groups/programs | STEAM development for youth/teens | volunteer opportunities for teens |
| STEM | Youth | Programs |
| youth development programs | teen museum programs | career development opportunities in museums |
| museum teen programs | youth job opportunities | youth workforce preparedness |
| youth engagement | young leaders | potential at risk youth |
| youth professional development | life skills for youth | Opportunities for underrepresented youth |
| Youth Programs | Informal learning |  |

**Q10. Information requested by funders**

Respondents indicated that their program funders were most interested in knowing what happened to the youth beyond the program (including high school graduation, college paths, and life stories). In addition to the three categories shown in the chart above, respondents added the following:

Characterizing youth participants:

* *Gender, diversity, and socio-economic status*
* *Demographics. Retention.*
* *Numbers/demographics; whether or not we fulfilled expected outcomes*

Characterizing youth lives beyond the program

* *Interest/pursuit of STEM Career*
* *Retention and completion of a STEM major*
* *Our funders are much more interested in college acceptance rates, major academic achievements (projects or scholarships), press coverage, after college successes, long-term impacts of the program, and hearing from the youth themselves.*
* *Return on investment, college degrees obtained or selected, etc.*
* *Academic gains from program. Alumni data- matriculated, graduated, STEM major?*
* *Stories of rising seniors and college choice*

Comparison study

* *Comparisons between program participants and teens who do not participate*

**Q2. Challenges of contacting alumni**

Despite their need for information about alumni, respondents believed that they were not easy to contact, especially by program outsiders.

1. **Anticipating Phase 2 of the research: Participants’ beliefs about factors that influence youth program outcomes**

**Q7. Perceived key factor in success**

The most commonly mentioned key factors in program success were relationships of youth within the organization (9 mentions), the authentic work of youth (5 mentions), and the learning opportunities (4 mentions). Interestingly, nobody even mentioned any of the organizational strategies (viz. partnerships with other organizations or professional development about the youth for rest of the staff).

* *The focus on job skills, the stipends, the access to mentors.*
* *Paid internship, focus on diversity, authentic science experiences, youth mentoring, year-round program*
* *Institutional buy in and dedicated staff and resources*
* *Two things: 1. The ability to do authentic work gives students an understanding of what the science field is and also puts them at a competitive advantage. 2. The class and internship combo- allows for serious science/work env and peer exchange/fun.*
* *Relationships. Between participants and between program staff and other institution staff who frequently interact with our interns.*
* *Consistency and focus on the topics- science is a high interest subject. Make sure the info is available to all of the learners, despite their perceived abilities*
* *Consistency - seeing the teens 3-4 x week all year.*
* *The support of the museum as a whole*
* *Consistency of support for program from institution and consistency of staff involvement*
* *The initial backbone structure provided by YouthALIVE!*
* *Hands on experience with programs for youth*
* *The authentic work experience that the participants have that directly supports the operations of the museum and the experiences of the visitors.*
* *Providing paid job opportunities for teens*
* *Personal commitment by staff.*
* *The staff that has been with the program for years, especially those that have been through the program previously. Also, the time we spend with our students working on and with them.*
* *The long duration and sophisticated level of policy, procedure, and strategy.*

**Q8. Perceived key weakness**

The most frequently mentioned factor that could be improved was the tracking and engagement of program alumni (mentioned by 5 respondents).

* *More continuous effort to cultivate life skills among the youth, keeping track of them through the program and beyond, not succumbing to institutional amnesia.*
* *Tracking alumni*
* *Has to be dynamic to meet the evolving needs of the institution and youth involved to optimize resources and relevancy.*
* *Institutional value- its integrated and some people value it, but I'd like to see it in other departments budgets, work plans, goals/performance evaluations etc. Communication- about program and for fund raising.*
* *I feel like I'm often struggling with the balance between this program being an effective staffing supply and being a program. Basically, how can we make sure that our participants are getting a program and not just being a workforce. We are doing that, but it requires constant negotiations of time and scheduling.*
* *Consistent staffing with equally consistent training- YA ended while I was still at the museum. I left material for the program to carry on, but there wasn't any real institutional memory after I left. New staff need mentoring and assistance to maintain the work load and quality*
* *Transportation and space for the teens*
* *Access to diverse professionals in STEAM careers*
* *Opportunities for youth to engage with other youth involved in museum programs*
* *More direct impact on the Museum and its guests.*
* *Data collection on impact of programs on youth afterwards*
* *Alumni tracking and engagement to both gather formative data around program improvement and long term impact.*
* *Research and evaluation on long-term impacts on participants to be used for funding requests*
* *Longevity, especially post-program.*
* *Space, and transportations*
* *Alumni engagement and strategies to addressing newest STEM careers that are outside the "normal" pipeline/pathway.*

**Q9. Perceived factors influencing youth lives beyond program**

In general, respondents believed that youths’ future lives were most strongly influenced by the close families, followed by their schools and communities, and least by impersonal communication media such as television and music. This pattern seems reminiscent of the Bronfenbrenner-style model of learning ecosystems proposed in the recent NRC report on youth programs (NRC, 2016). The only exception is “church,” which may perhaps have been regarded as something only some of the youth participate in.

1. **Overall impacts of conference on participants**

Finally, the participants showed a range of impacts as anticipated by the project team:

1. Participants expressed high levels of engagement in the Roads Taken research:

Participation levels were extremely high: Of the 21 program staff who attended the first webinar, ALL 21 also attended the second webinar, and 18 (86%) also completed the final online survey that this report analyses.

Respondents felt very positive about their role and contributions to the Roads Taken project and to the field of youth programming more broadly. The believed they had things to share as well as learn. There was slightly less certainty about the value for research, but every indicator had a majority of strong positive response.

1. Just over half the respondents felt strongly that they had a better understanding of the history, research, and youth program landscape. This is not quite as high as the webinar appreciation and involvement indicators, but still shows evidence of learning.
2. Respondents expressed strong support for the idea of being in a youth program network. At the same time, they did not feel particularly strongly connected with the people they had shared the conference with, nor did they see network-creation as an obvious next step for them following the conference. Very few saw a clear next step at all.

**Summary**

* The Roads Take conference achieved a very high level of engagement and satisfaction by pairs of youth program staff, despite being held entirely online.
* The teams were able to fill out the Program Profiles for their organizations in approximately 3-6 hours, and did not find this onerous.
* Aside from the information in the Program Profiles, conference participants (and, apparently, their funders) were most interested in finding out more about youth trajectories beyond the program: HS graduation, college, and STEM careers of alumni. At the same time, they felt the alumni would be difficult to contact, and especially so for outsiders.
* Participants were also interested in hearing about funding options and detailed breakdowns of program costs.
* Overall, participants believed the most likely factor responsible for program success was the relationships between youth and others in the organization (peers, mentors, and staff more generally). Several participants also mentioned authentic work and learning opportunities, and the continuity of year-round consistent programming over time.
* The most commonly mentioned weakness was lack of tracking and engagement of alumni, despite the interest in this topic.
* Participants believed the greatest influences on youth beyond the program would be their relationships with close family members.
* A large majority expressed interest in being part of an ongoing network of youth program providers, and believed they could make time for this. However, they did not see this as a natural follow-on opportunity arising from the Roads Taken webinars, and most did not feel a strong personal connection with others in the conference (perhaps because most of the collaborative work to reflect on the youth programs was done within, rather than across, organizations).

**Recommendations**

Based on these findings, we suggest the following:

* Promote broad use of the Program Profile, since participants see the process as valuable and not onerous.
* Explore options for tracking and engaging alumni to help programs address funders’ requests for impacts. Consider including adding a section on “alumni engagement and tracking strategies” to the Program Profile.
* Also include in the Program Profile a question that asks for breakdown of costs to separate participant payroll from other costs.
* Add program and staff longevity as variables to explore in causal studies.
* If the project team has the goal of revitalizing youth program networks, act now (while enthusiasm is high) to empower conference participants to do this.

Appendix: Survey Questions

Welcome.

Thank you for being willing to take this survey about the Roads Taken Virtual Conference. Your responses will provide feedback about the quality of the webinars, and will help the team make final revisions to the Program Profile.

We think this survey will take 10-15 minutes to complete.
It has 10 questions.

Sue Allen, the project's external evaluator, will receive your answers to the questions. Your name and your institution's name will not be associated with any of your comments, so please be very honest!

If you have any questions about this survey, please contact: Sue Allen, sueallenresearch@gmail.com

Q1.

Please rate your satisfaction with each of these aspects of the webinars.
Use the scale below, where 1 = "Not at all satisfied," 4 = "Neutral," and 7 = "Extremely satisfied."

* Opportunity to get comfortable with the video-conferencing technology
* Sound quality
* Video quality
* Length
* Balance of items in the agenda
* Facilitation by leaders
* Icebreakers
* Speaker presentations (webinar 1)
* Discussion groups (webinar 2)
* Communication before and after the webinars
* Opportunity to ask questions
* Clarity of project goals
* Clarity of my role
* Clarity of future roles I might play

Q2.

Please rate your agreement with each of these statements.
Use the scale below, where 1 = "Not at all satisfied," 4 = "Neutral," and 7 = "Extremely satisfied."

* I learned something new about the history of YouthALIVE! programs.
* I didn’t feel much personal connection with the other people on the video-calls.
* My institution has played an important role in the evolution of STEM youth programs.
* Staff member participation in an active network of youth programs would benefit our institution.
* I’m not excited to participate in a network of youth programs because we don’t have the time.
* Developing a Program Profile gave me the opportunity to reflect on our youth program.
* Project purpose is clear
* My work is important to the larger field of STEM youth programs.
* It would be difficult to locate many of our program alums.
* An effective way to get a high percentage of our alums to participate in research would be for a research group external to the program to contact them.
* I have a better understanding of how our program compares with other STEM youth programs.
* I think my perspective will make a significant contribution to the research.
* The research from this study probably won’t be very useful in practice.
* Our program has things to share with the wider STEM youth program community.
* Our program doesn’t have much to learn from other STEM youth programs.
* It’s hard to translate research into practice in STEM youth programs.
* I would enjoy spending more time with the people I met online from other organizations.
* I know what comes next on this project.
* Finding all the information for the Program Profile was a waste of my time.

Q3.

About how many hours, in total, did it take you plus the other institutional representative to fill out the Program Profile?

Q4.

* Please rate how difficult or easy it was to find each piece of information.
Use the scale below, where 1 = "Extremely difficult," 4 = "Neutral," and 7 = "Extremely easy."
* Organization's annual budget
* Program annual budget
* Age range of participants
* Target population
* Number of years youth can participate Frequency of meeting
* Average program contact hours per year
* Average number served per year
* Total number served since the program began
* Number of full-time staff members
* Number of part-time staff members
* Total Full-time equivalent per year program staffing
* Learning strategies during YA
* Learning strategies current
* Leadership strategies during YA
* Leadership strategies current
* Relationship strategies during YA
* Relationship strategies current
* Organizational strategies during YA
* Organizational strategies current

Q5.

Is there additional information about other programs that would be useful to you?

Q6.

What are three terms or short phrases you might type into a search engine to look for information about another program?

Q7.

In your opinion, what aspect of your program was most important for its successes?

Q8.

In your opinion, what aspect of your program could use the most improvement?

Q9.

In your opinion, how much did the following factors influence the lives of the alums after they left your program? Use the scale below, where
1 = "Had no influence" and 7 = "Had an extremely strong influence."

* Quality of schools
* Attitudes of teachers
* School disciplinary practices
* Quality of high school counseling
* Extra-curricular activities (e.g. sports, band, science club)
* Parent/grandparent support
* Family difficulties
* Siblings
* Friends
* Church
* Community organizations (Boys & Girls Clubs, Scouts)
* Community employment opportunities
* Community norms and values (e.g., race relations, acceptance of women in the workplace)
* Local law enforcement practices
* Television
* Popular music
* The Internet

Q10.

What information about participants is valued by funders?
Use the scale below, where 1 = "Never requested," and 7 = "Always required."

* High school graduation rates
* Grades
* Stories about alums of the program