

Mini-Grant Evaluation Report Summary April 2011

Mini-Grant Evaluation

Introduction

Numerous organizations provide valuable but uncoordinated activities and support services related to motivating and supporting girls' interest in science, technology, engineering, and math (STEM) careers. Mini-grants are awarded to girl-serving STEM focused programs to support collaboration, address gaps and overlaps in service, and share promising practices. Mini-grants are a small amount of seed funding and are not intended to fully fund entire projects. Mini-grants are designed to build collaboration between existing programs and organizations in order to encourage girls to pursue STEM-related educational programs and careers as well as build organizational capacity and sustainability.

Following the completion of all project activities, mini-grant recipients complete an online report administered by the external evaluator, Evaluation & Research Associates. Recipients are asked for information about their project implementation, the collaboration between project partners and the exemplary practices they utilized.

This summary contains results from 129 mini-grant projects completing activities in four years of the National Girls Collaborative Project. Mini grant activities were completed in 24 different states..

Mini-Grant Projects

Overall, mini-grant leads perceived their projects as very successful. On a scale from 1 = Not successful to 5 = Very successful, the mean response was 4.54, and 95% indicated a 4 or 5.

Mini-grant leads specified at least two objectives in their project proposal, with the option of selecting from a list of common objectives or writing their own. After project activities, respondents rated how well their project attained each objective using a scale from 1 = Not at all to 5 = Completely. **For all objectives, the mean level of attainment was 4.40, with the large majority (89%) of respondents indicating either a 4 or 5.** Objectives were commonly related to STEM careers, including participants demonstrating knowledge of STEM careers and what they entail. Other objectives were related to STEM in general, including those aimed at increasing participant abilities and knowledge in STEM, STEM education, and building relationships between participants and other groups—including STEM

"I had an amazing time learning about all the opportunities in information technology. I've never known what job I wanted to do but thanks to this program I am looking forward to a job in this field."

— NGCP Mini-Grant Participant



professionals, other types of role models, and parents.

For each objective, respondents also indicated the type of evidence they were using for their ratings. Most relied, at least partially, on informal discussion with participants (74%) and informal observation of participants (72%). Over 41% of respondents administered surveys/questionnaires to participants for formal data collection.

Effective aspects of their projects that helped them meet their objectives were collaboration between partners and partners' contributions, providing girls an opportunity to be exposed to STEM and to gain confidence, and providing mentors or role models, and hands-on activities. Aspects of their projects they considered the least effective were the short-term duration, need for additional funding, and elements of the activities that could have been improved.

Forty percent of mini-grant projects met only one time with participants to complete project activities. Nine percent met two or three times total, and 35% percent brought participants together four to ten different times. Another nine percent of projects met with participants more than ten times. The lengths of the activities varied: 37% met for less than three hours, 43% met between three and six hours, and 20% had activities that were longer than six hours.

Over half of the projects that were started with mini-grant funding plan to continue—65% indicated they would continue.

Building Collaborative Relationships

The NGCP funded the mini-grants as collaborative projects, with at least two partners working together on a new activity. **The collaborations were rated as successful by the large majority of respondents. On a scale from 1 = Not successful to 5 = Very successful, 93% selected a 4 or 5, and the mean response was 4.50.**

Mini-Grant Project Participants

Mini-grant projects reporting participant numbers (125) served a total of 12,163 girls with a range up to 1,700 girls. The median number of girls involved in the projects was 25, and the mean was 99. Forty-five projects also served boys, reaching a total of 5,609 boys.

Projects, on average, reported the majority of participants as Caucasian (56%), though they also served large numbers of participants who were Black (16%) or Hispanic (15%).

Participants were most commonly in middle-school (41%) or in K-5th grades (34%). Twenty-percent were in high school.

“The mini-grant supported more than this actual program. It provided the incentive to reach out in a different way that might not otherwise be supported. The mini-grant created the opportunity to collaborate with other groups and extend learning opportunities.”

— NGCP Mini-Grant Recipient

Partners worked together in a variety of ways, with about 75% of partners planning an event together, 60% co-hosting the project, and partners providing resources to the other organization (half of the projects had both organizations contributing resources). In 66% of the projects, one of the organizations recruited or provided the participants.

Fifty-eight percent of partners had previously worked together on a different project, and 71% of mini-grant leads indicated they would continue to work together in new ways.

Mini-grant recipients were asked to identify the most effective and least effective aspects of their collaboration. **The most effective aspects included an enhanced participant experience, in which participants were provided additional opportunities or exposure to STEM activities such as meeting successful women engineers. Recipients also specified the benefits of their partner's resources or expertise, such as involving parents.** The process of collaborating was effective for many partners who mentioned the brainstorming, communication, and efficiency as benefits. Least effective aspects included when a partner took on a more limited role than desired, and there were difficulties coordinating and scheduling.

Building Capacity

Mini-grant projects were required to focus on either informal learning or evaluation and assessment in their projects. In the mini-grant reports, recipients specified what exemplary practice they utilized and where they found information on the strategy.

In the area of Informal Learning, responses ranged from using group work, hands-on activities, real-life "work," and exposure to female-role models. These strategies were identified in resources such as research by AAUW, other projects and their websites such as Great Science for Girls and Techbridge.



"NGCP has given a structure and resources that strengthened the relationships between my program and others. Mini-grants also provided opportunities to collaborate with entirely new partners. NGCP has opened many doors for us. We now have people we can collaborate with or consult with all across the country. It has created a strong shift in our programming and allowed us to also touch the many groups we work with - especially teachers. It will make a significant difference in the quality of STEM education in our city."

— NGCP Annual Survey Respondent

Projects that were utilizing strategies related to evaluation and assessment frequently got their information from the Assessing Women and Men in Engineering Project (AWE), a partner of NGCP. They also cited other resources, including Fisher & Frey's Checking for Understanding: Formative Assessment Techniques for your Classroom. These mini-grant projects focused on developing measurable objectives and designing and administering new data collection tools such as surveys, interviews, and pre-post measures.

Summary

NGCP funded mini-grants have a variety of goals from providing new opportunities for girls in STEM, building collaborations between programs and organizations, to building the capacity of programs. The 129 projects completing the mini-grant evaluation report demonstrated progress toward reaching each of these goals.

Respondents rated their projects and the collaborative relationships as successful. Collectively they provided new STEM opportunities for over 17,000 youth. The projects applied exemplary practices in informal learning or evaluation and assessment in their work. The project's objectives typically focused on increasing participants' knowledge of STEM careers, their likelihood of pursuing STEM educational opportunities, and building abilities in STEM-related knowledge of skills. Most respondents indicated they met their objectives through the collaboration with their partner and the exemplary practices they utilized.

The activities started with mini-grant funding are likely to continue with 65% of respondents indicating they would continue the mini-grant project activities, and **71% specifying their work with their partner would extend to new projects.**

"We very much enjoyed the opportunity to collaborate with several professional women in our community and we look forward to continuing these relationships in the future. The girls we reached through this program indicated an increased awareness and interest in a variety of STEM careers and came away with a better understanding of some of the educational requirements needed to pursue these vocations. They were exposed to several local colleges and the programs available to them in the future."

— NGCP Mini-Grant Recipient

