



EVALUATION

NGCP EVALUATION SUMMARY

“Since recruiting females into STEM programs/majors continues to be a challenge, as is keeping them once in, NGCP, by creating regional and national networks/collaboratives, can bring the power of a ‘collective’ voice of ‘best practices’ across all aspects of the K-20 pipeline.”

2010 Annual Survey Respondent



NGCP EVALUATION HIGHLIGHTS

PROJECT DESCRIPTION

The National Girls Collaborative Project (NGCP), a National Science Foundation funded project, brings together organizations throughout the United States that are committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM). The goals of NGCP are to:

1. Maximize access to shared resources within projects and with public and private sector organizations and institutions interested in expanding girls' participation in STEM.
2. Strengthen capacity of existing and evolving projects by sharing research-based strategies and program models, outcomes and products.
3. Use the leverage of a network or collaboration of individual girl-serving STEM programs to create the tipping point for gender equity in STEM.

The evaluation of NGCP, conducted by Evaluation & Research Associates (ERA), collects quantitative and qualitative data to inform the project on an ongoing basis and measure progress toward outcomes.

This summary includes findings from the first four years of activities.

NGCP has established a network of 18 regional Collaboratives, serving 30 states, and facilitating collaboration between more than 8,800 organizations. More than 200 senior professionals serve as National and Regional Champions, helping promote and develop the network as a national leader in shaping communities of practice around informal STEM education for girls.

Through regional and national efforts, we estimate 5,035,918 girls are served indirectly by NGCP by having their leaders (parents, volunteers, and non-profit staff) trained in the philosophy, knowledge, and methods of NGCP and participating in the incentives to improve their programs and collaborate.

Reach of the NGCP

- ▶ **11,721,111** Web site visits
- ▶ **2109** programs in the Program Directory
- ▶ **50** average NGCP webcast participants (live broadcast)
- ▶ **76** total NGCP events offered by Collaboratives
- ▶ **9,308** practitioners served
- ▶ **3,275** total NGCP event attendees
- ▶ **61** attendees on average at 20 NGCP Kick-off events
- ▶ **38** attendees on average at 33 NGCP Forums
- ▶ **17,058** participants served in 126 mini-grants completing activities

INCREASING COLLABORATION

Examples of strategies used by the NGCP to increase collaboration among girl-serving STEM programs include mini-grants awarded to two or more programs collaborating on a new program; in-person events; and an online program directory where programs specify their needs and resources.

NGCP enables participating programs to share their resources, provides opportunities to interact with other programs, and encourages collaboration. As a result of NGCP, 62% of respondents in a 2010 annual survey of programs registered in the NGCP program directory agreed or strongly agreed that they were more likely to share resources with another program and 59% agreed or strongly agreed they were more likely to consider collaborating with another program or organization because of NGCP.

In addition, 37% of respondents indicated that participating in the NGCP had a moderate or high impact on their level of collaboration with other programs. Seventy-seven percent of those attending a NGCP event followed-up with somebody they met at the event, most commonly to discuss ideas for collaboration or share resources. Attendees specified the most valuable aspects of events as networking and meeting others in their area involved in similar work. The 2010 annual survey results indicated that those who attended at least one in-person NGCP event were significantly more likely to have higher mean levels of collaboration with other STEM-related groups, rate the impact of NGCP on their collaboration more highly, and have more knowledge and likelihood of collaborating with others.

Annual survey respondents were asked to indicate their level of collaboration with various types of STEM-related programs and organizations using a scale from 0 = No Interaction to 5 = Collaboration. Overall, the mean level of collaboration in June 2010 was 1.61. Mean collaboration levels were significantly correlated with the number of years respondents had been in the Program Directory: those involved since 2006 or earlier had a mean collaboration level of 2.15 while those joining the directory in 2010 had a mean collaboration level of 1.61. Those participating in the NGCP indicated they most commonly made contact or collaborated with non-profit organizations (33%), K-12 teachers or counselors (32%), working STEM professionals (27%), and higher education faculty (26%).

“NGCP creates a community of organizations working toward the same goal and makes shared resources accessible. It’s nice to know you’re not working toward a goal alone.”

2010 Annual Survey Respondent

The NGCP program directory is an online tool that enables programs to find other programs and resources. Thirty-two percent of program directory users indicated they searched for collaborative partners for a NGCP mini-grant and 30% used the directory to find other programs to work with. Of 126 mini-grant projects, 66% indicated their project would continue beyond the award and 70% indicated they would collaborate with their partners in other work.

The mini-grant collaborations were considered effective overall, with 92% of respondents indicating the two highest ratings of success (on a five-point scale). Effective collaborations utilized the strengths of both partners and most partners planned activities together and shared resources, participants and/or locations.

“The open encouragement of collaborating through the mini grant process has heightened my likelihood to seek out partners.”

2010 Annual Survey Respondent

When asked about the value of the NGCP, 2010 annual survey respondents most commonly referenced the networking and collaboration opportunities and the resulting benefits to themselves and their programs.

INCREASING PROGRAM CAPACITY

NGCP focuses on building the capacity of girl-serving STEM programs in two areas: evaluation and assessment and informal learning. NGCP provides professional development and resources at in-person events and online webcasts; information and resources on the NGCP Web site and E-Newsletters; and requires mini-grant projects to focus on one of these areas.

As part of the NGCP model, participating programs build capacity through collaboration—learning practices and program models from each other and exchanging resources. One participant described how his/her program was influenced by others in NGCP, “Our program is modeled after several NGCP [programs] that appeared to be successful and within our reach.”

Events and webcasts have been consistently rated as relevant and useful by participants. Eighty-eight percent of event attendees rated resources provided as “Good” or “Excellent.” Forum attendees were very likely to plan to apply what they learned to their work (mean = 4.46 on a scale from 1 = Strongly Disagree to 5 = Strongly Agree), and of those who attended a webcast, 57% indicated they applied what they learned to their own work. Examples of how participants used what they learned from a NGCP webcast included using data presented in a grant application, creating curriculum for girls, and being more educated when speaking to others on gender equity issues. Webcasts were praised for being a quality resource and a valuable way to stay current on issues.

The NGCP Web site features resources on evaluation and assessment and informal learning. Annual Survey respondents; mean rating of the relevancy of the content was 4.02 on a scale from Poor (1) to Excellent (5), and 80% rated the relevancy of the site’s content as Good or Excellent. About one-fifth of annual survey respondents accessed the Web site to find resources related to each of these topics, and of those, 14% indicated they were moderately or greatly strengthened by the evaluation and assessment resources and 28% were moderately or greatly strengthened by the informal learning resources. NGCP partners with “Assessing Women and Men in Engineering (AWE),” and AWE resources were downloaded by 20% of annual survey respondents in 2010, an increase from 11% in 2009. Annual survey respondents’ self-ratings of their knowledge and skills related to evaluation and assessment and informal learning increased from 2009 to 2010, with the largest increase in their ability to implement informal learning strategies. One annual survey respondent stated, “All the resources and information we derived from NGCP Web site have improved our effectiveness and are the reason for our success.”

“We are now connected to people that we know will help us as we develop more girl-friendly and girl-focused programs.”
2010 Annual Survey Respondent

SUMMARY

The NGCP model facilitates and supports Collaboratives that serve and connect local girl-serving STEM programs by holding in-person events, distributing a regional newsletter, awarding mini-grants, and increasing awareness of local resources. This cadre of trained regional teams and their network of girl-serving STEM programs and organizations is one output of the NGCP. NGCP activities are well-integrated into regional collaborative team members' other work and take advantage of their established networks. In 2009, 70% of regional team members indicated their region will likely or definitely continue as regional collaborative after NSF project funds are expended.

A long-term goal of the NGCP is to create the “tipping point” for gender equity in STEM. The tipping point is the moment when individual efforts are transformed into systemic, nation-wide change. Sixty-four percent of 2010 annual survey respondents indicated NGCP had the potential to create the tipping point for gender equity in STEM. They believed this would be accomplished by building a network and creating collaborations, increasing opportunities for girls to engage in STEM, bringing attention and energy to issues of gender equity, and providing resources to strengthen girl-serving STEM programs. One participant described how NGCP provides opportunities, builds capacity, and motivates people to influence gender equity in STEM, “NGCP increases awareness as well as provides opportunities and financial support to get involved, take action, and do something to move this agenda forward.”

“NGCP has substantiated the importance of collaboration with schools, not-for-profits and industry in best preparing and attracting girls for future careers in STEM.”

2010 Annual Survey Respondent

EVALUATION
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