



National Girls
Collaborative
Project

Annual Survey Summary 2022





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INTRODUCTION

The National Girls Collaborative Project (NGCP) 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), with a mission to connect, create, and collaborate to transform STEM for all youth.

NGCP works toward the following three priority goals to meet the needs of, and achieve outcomes for, our beneficiaries, who include girls and youth who have been historically excluded from STEM, STEM program practitioners, and local Collaboratives:

- 1.** Build and sustain a network of advocates to provide equitable and inclusive STEM opportunities;
- 2.** Catalyze equity in STEM from research to practice by providing actionable knowledge that transforms the STEM experience; and
- 3.** Increase our collective impact by strengthening organizational effectiveness and enhancing our fiscal sustainability.

The NGCP Annual Survey is designed to collect data from professionals in our network related to their engagement with NGCP and the potential impact of NGCP on their practice, programs, and organizations. NGCP also uses the Annual Survey to assess needs in our network and solicit feedback on how we may be able to address those needs moving forward as an organization. Originally developed as part of a National Science Foundation grant by the Education Development Center (EDC), the 2022 version of the survey has been revised to accurately reflect our current work.

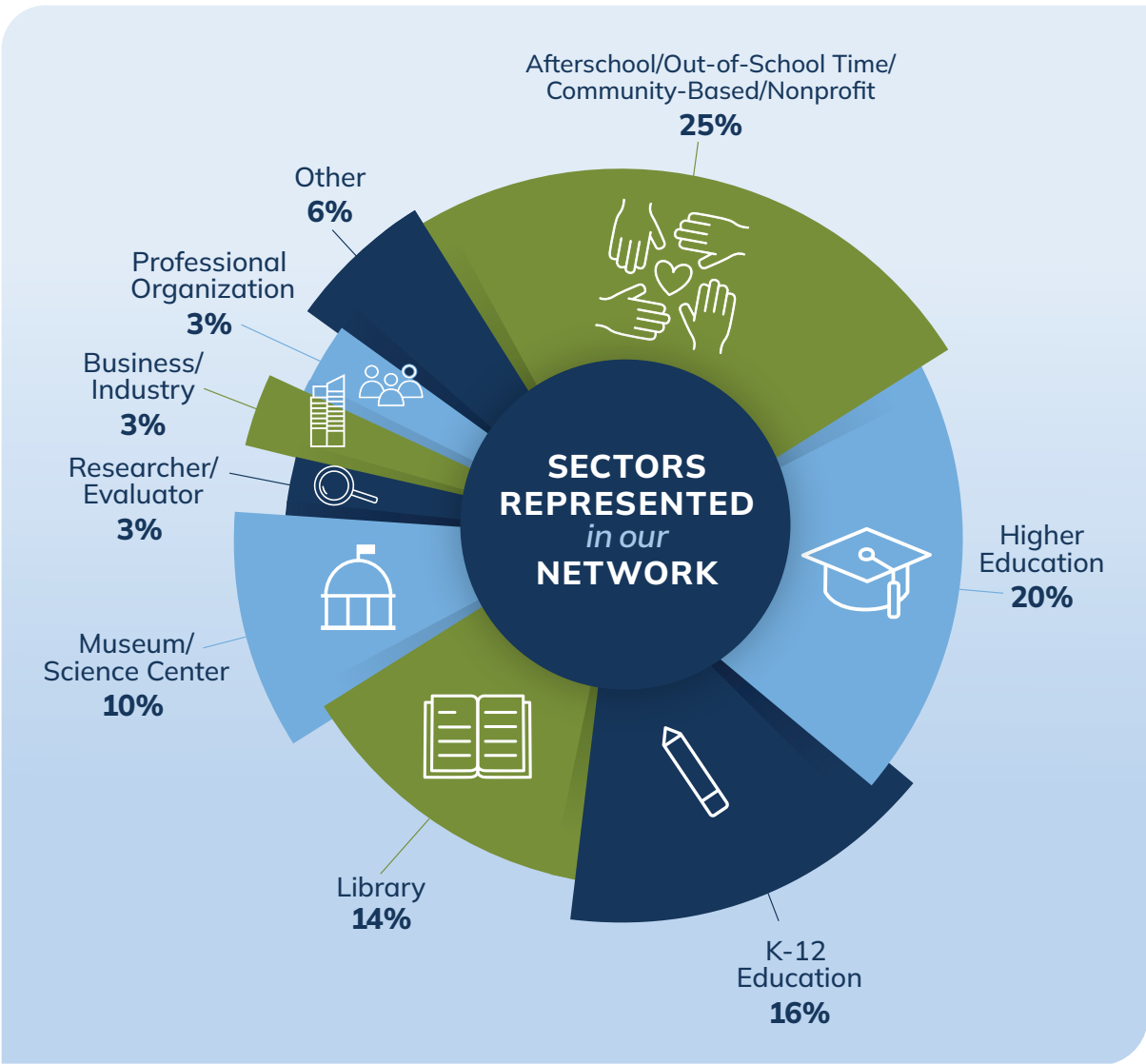
The 2022 NGCP Annual Survey was distributed to our network via the NGCP monthly e-newsletter and social media channels beginning on May 9th, 2022 and it closed on June 17th, 2022. A total of 148 NGCP participants responded to the 2022 NGCP Annual Survey, providing a snapshot of NGCP participants and their experiences, but this report should not be interpreted as a summary of NGCP participants and their experiences overall. For the purposes of this report, Annual Survey respondents will be referred to as 'NGCP participants'.

RESULTS

The NGCP Network

NGCP works to empower individuals, programs, and organizations focused on increasing gender equity in STEM by building a robust network, facilitating collaboration, and providing an array of valuable opportunities that offer multiple ways to engage with and benefit from participation in NGCP. The NGCP network is wide reaching, facilitating collaboration across 42,500 organizations, which serve 20.2 million girls and 10 million boys.

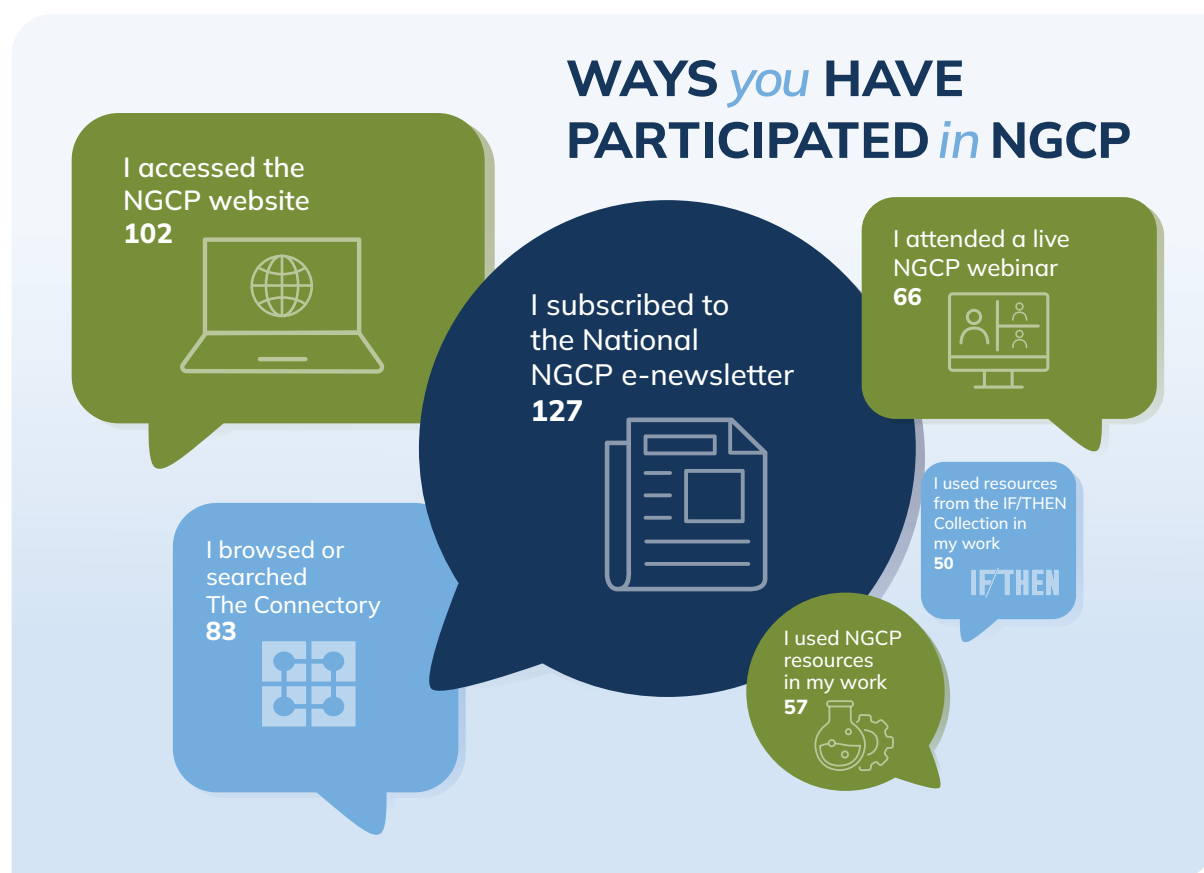
The NGCP participants who took the Annual Survey provide insight into the wide range of programs and settings that the NGCP network reaches.



Participants report working in a variety of sectors, including afterschool/out-of-school time/community-based and nonprofit organizations (25%), higher education (20%), K-12 education (16%), libraries (14%), and museums and science centers (10%). A smaller percentage of participants represent business and industry, research and evaluation, and professional organizations.

Over half of NGCP participants (61%) are involved in afterschool or summer programs outside of the school day and a majority (78%) are part of programs that directly serve K-12 youth. Of those that directly serve K-12 youth, they serve an average of 60% who identify as girls or young women, an average of 55% who have been historically underrepresented in STEM due to race, ethnicity, or socioeconomic status, and an average of 10% who have a disability. NGCP participants' programs vary in terms of how explicitly STEM-focused they are, with over half (65%) reporting that 'most' or 'almost all' of their typical activities relate to STEM, 19% report 'about half' of their activities relate to STEM, and 15% report that just 'a few' of their activities relate to STEM.

There are numerous ways to engage with NGCP, offering opportunities for individuals, programs, and organizations regardless of professional role, sector, and geographic location.



NGCP participants were most likely to subscribe to the National NGCP e-newsletter, access the NGCP website, browse or search the Connector, attend live webinars, and use NGCP resources in their work, and specifically use resources from the IF/THEN® Collection in their work.

Other ways participants engage with NGCP include listing their program or organization in the Connector, participating in their local Collaborative, accessing an archived NGCP webinar, participating in a Partner Project, using the FabFems database, attending an in-person event, participating in a workshop or training related to Million Girls Moonshot (MGM), and serving as a National Board or Champions Board Member.

NGCP participants report varying lengths of experience with NGCP. About half (53%) have been involved for four years or more, 32% have been involved between one and three years, and 14% are new to NGCP, having been involved less than one year.

Given the unique nature of the past two years with the COVID-19 pandemic, an increasing number of schools and out-of-school time programs have been working with youth virtually or in hybrid contexts. In light of these changes, the Annual Survey asked NGCP participants if they utilized NGCP resources differently throughout the pandemic than they had previously. About half (46%) reported they did not use NGCP resources differently, 39% reported they did use NGCP resources differently, and 15% were not sure. Of those who used NGCP resources differently during the COVID-19 pandemic, most reported that they either started using NGCP resources during this time or used them more than they had previously.

When asked to explain their use of NGCP resources during the COVID-19 pandemic, the majority of respondents who indicated they used resources differently, more, or started during the pandemic, shared how NGCP resources helped to address the needs of girls or youth related to virtual/online learning. Several respondents also mentioned specific NGCP resources, such as the IF/THEN® Collection, or resource-rich events, such as webinars.

Collaboration

Collaboration is key to NGCP's work, providing opportunities for professionals to connect with one another, and resources to effectively collaborate to better and more efficiently engage and serve girls, and all youth, in STEM. The 2022 NGCP Annual Survey asked participants to share how NGCP has helped support them in making connections and collaborations in their work. NGCP participants report connecting with an average of 53 people through their participation in NGCP. These connections include representatives from a variety of organizations, particularly K-12 education, afterschool/out-of-school time/community-based or nonprofit organizations, and museums and science centers, but also libraries, professional organizations, higher education institutions, and researchers and evaluators.

Seventy-nine percent of NGCP participants report that NGCP impacted the collaboration between their program and other programs and organizations to some extent, with 34% reporting low impact, 33% reporting moderate impact, and 12% reporting high impact.

Exemplary Practices

NGCP works to strengthen the capacity of girl-serving STEM organizations and programs by sharing exemplary practices based on research. This is done through the NGCP website, webinars, e-newsletter, Partner Projects, and in-person and virtual events. Exemplary practices are a foundation of NGCP's work and result in positive outcomes for participants who have used them.

The majority of NGCP participants (89%) report that they have either used an exemplary practice (46%) or plan to use an exemplary practice in the future (43%).

Did the use of an exemplary practice lead to a positive outcome or outcomes in your program?



Of those who have used an exemplary practice, 95% report that >> they or their program experienced a positive outcome as a result.

The most frequently used exemplary practices are strategies and resources focused on engaging girls and youth historically underrepresented in STEM. Additionally, NGCP participants report using strategies for incorporating role models into programming, strategies for designing a program that engages girls and/or youth historically underrepresented in STEM, and exemplary practices related to collaboration. Fewer participants report using exemplary practices for facilitating a training or workshop and practices related to evaluation and assessment.

Twenty-four participants detailed various ways that NGCP exemplary practices led to a positive outcome(s) in their programs. Many simply noted that there was a general increase in knowledge around the exemplary practices, at an individual or organization level. For example, one NGCP participant stated:

“These best practices are key to a successful program and are the cornerstone to the work we do with girls.”

Others mentioned that NGCP resources have resulted in increased STEM equity and engagement in their programs, increased their capacity to serve youth, or specifically mentioned the positive impact of NGCP-led trainings, curriculum, and evaluation resources.

Partner Projects

NGCP Partner Projects are those done in partnership with other organizations, such as SciStarter, The Franklin Institute, and NASA, with the goal of scaling exemplary practices, resources, and funding opportunities through the NGCP network.

Forty-four percent of NGCP participants report participating in a Partner Project, including Leap into Science (31), SciGirls (26), Girls STEAM Ahead with NASA (24), Science Action Club (12), CryptoClub (11), GSK in the Summer (6), Brite (5), and National Citizen and Community Science Library Network (3).

An overwhelming majority (97%) of those who participated in a Partner Project report that it led to a positive outcome for them or their program. >>

Free response comments further highlighted five main benefits from participating in Partner Projects: 1) they provided a new approach; 2) they fostered collaborations in their community and/or with other like minded professionals; 3) they increased involvement in their programs; 4) they elicited positive participant feedback from either students or educators; and 5) they created the foundation to develop an entirely new program. One respondent shared that they “have seen improvement in their STEAM activities and engagement as a result” of the Partner Project.

Did participation in a Partner Project lead to a positive outcome or outcomes for you and/or your program?



“Having access to strong resources and the funding to support their implementation/ dissemination has helped us to build broad and long-term partnerships across the community that might not have happened otherwise.”

NGCP participants were most likely to implement program activities directly with youth, but some also supported the coordination and administration of the Partner Projects or led training with educators and staff. NGCP participants were slightly more likely to get involved in a Partner Project because of their involvement with NGCP (56%) than for their involvement with the Partner Project to lead to further involvement in NGCP (44%).



The FabFems directory is an international database of women in STEM professions that is accessible to young women, girl-serving STEM programs, and other organizations that are working to increase career awareness and interest in STEM.

Almost half (42%) of NGCP participants have used FabFems and report using it for a variety of purposes. The most common reasons NGCP participants have used FabFems are to search for:

- information about women STEM professionals, their careers, and/or their career paths;
- a virtual role model; and
- resources related to role models.

NGCP participants also used FabFems to create a profile (become a FabFem!) and to search for an in-person role model.

The majority of NGCP participants who have used FabFems (68%) report that it led to a positive outcome for them or their program, but NGCP participants also expressed challenges related to finding FabFems role models in their region or in a particular field of interest, as well as contacting FabFems via the website.

NGCP participants suggested improvements to FabFems in three areas: 1) Increasing opportunities for engagement with FabFems role models and increasing awareness of the database, such as through a social media campaign and sharing of videos featuring role models; 2) adding or increasing role models from different or more diverse career paths, including role models engaged in interdisciplinary pathways, such as the arts; and 3) general improvements related to the functionality of the website.

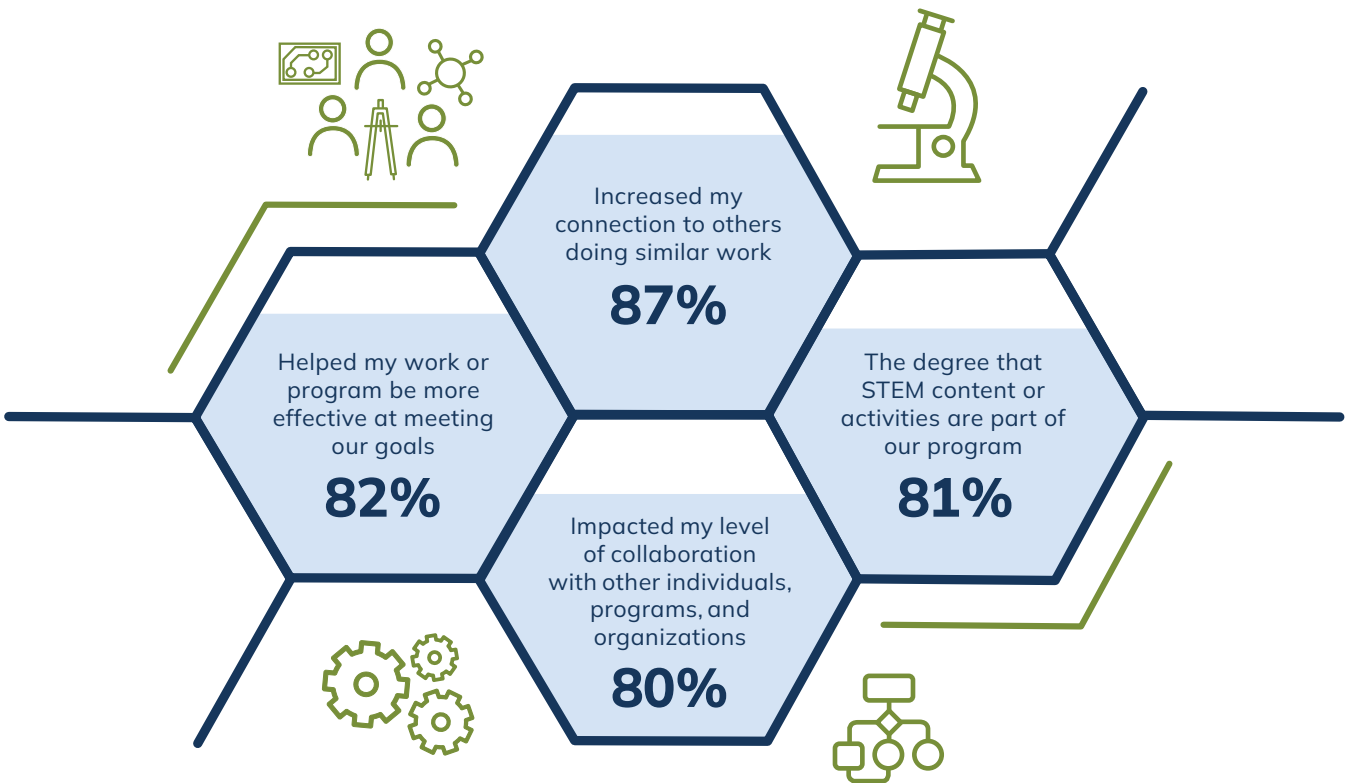
NGCP Impact

NGCP participants overwhelmingly report that NGCP has positively impacted their practice or program overall (89%). In response to how NGCP involvement has positively impacted their program, the most popular mention was various NGCP resources. One participant feels that “It has provided needed resources and inspiration.” Participants also stated that their overall knowledge increased, including knowledge of equity, knowledge about women in STEM, and knowledge of STEM activities. One participant stated:

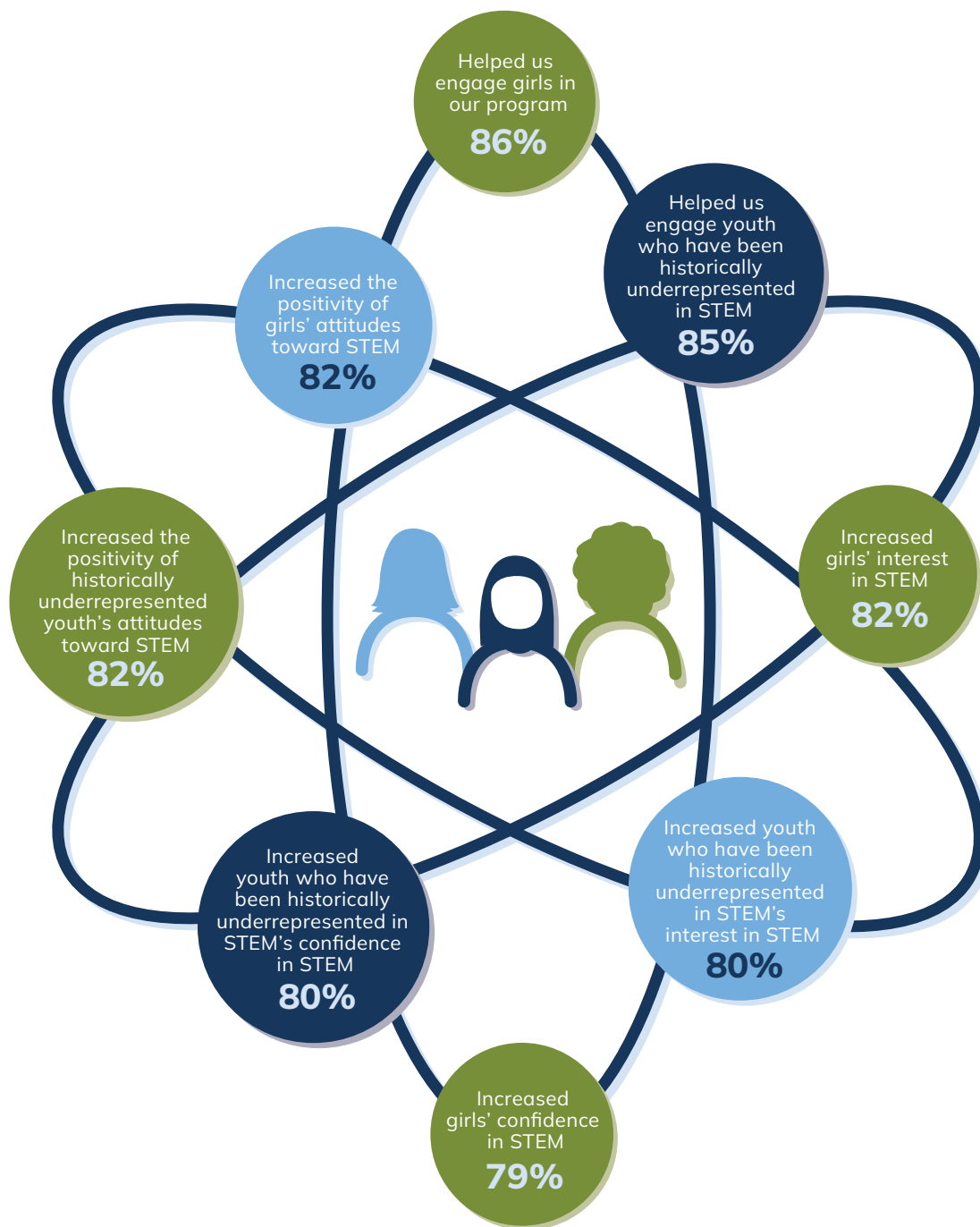
“ I have a better understanding of how to address girls in STEM.”

Participants also praised networking and collaboration, and many stated that they enjoy the sense of community that NGCP involvement has brought them. One participant shared that “NGCP is a wonderful network of professionals who are always willing to give a helping hand to promote girls in STEM and STEM to underserved communities. I have learned a lot and have made many contacts that I would not have made otherwise.”

NGCP’s impact on participants can be seen in a variety of ways and relates to participants’ experiences and capacity, their program or organization’s capacity, and the impact they are able to have on girls and youth they serve.



NGCP participants overwhelmingly report that NGCP has increased their connection to others doing similar work (87%), their level of collaboration with other individuals, programs and organizations (80%), their program’s effectiveness (82%), and the degree that STEM content and activities are a part of their program (81%).



NGCP participants are also very positive about the impact that NGCP has on their ability to engage youth and, indirectly, on the youth they serve. Participants report that NGCP helped them engage girls (86%) and underrepresented youth (85%) in their programs, and that NGCP helped increase girls' interest in (82%), confidence in (79%), and positive attitudes toward (82%) STEM as well as underrepresented youth's interest in (80%), confidence in (80%), and positive attitudes toward (82%) STEM.

Fewer NGCP participants report that NGCP helped them or their work be more efficient (73%) or improved their programs' sustainability (66%).

Girls and STEM Programming

The Annual Survey also asked NGCP participants to share their opinions about the state of girls in STEM programming to gather information about how those working in the field of gender equity and STEM feel about progress (or lack of) being made.

An overwhelming majority of NGCP participants believe that more girls are getting access to STEM opportunities today than 10 years ago (89%). Participants who provided more information specifically mentioned that this greater access has resulted from fewer barriers or discrimination against girls in STEM. They also mentioned that research demonstrates that girls have more STEM opportunities today and suggested an overarching shift causing our society to become more “friendly” to the idea of STEM diversity. However, some NGCP respondents made sure to emphasize that there is still work to be done in this area.

An overwhelming majority of NGCP participants also believe that STEM programming for girls has improved in the last 10 years (90%). When asked to explain, participants attributed improved STEM programming to greater access, general increased awareness of best practices or available resources, and hinted at the idea of a societal shift, causing girls to feel more comfortable in STEM spaces. Once again, participants stated that despite this progress there is still much work to be done in this field, including calling out greater gender inclusivity as a priority.



Moving Forward

In an effort to learn how NGCP can help our network moving forward, the Annual Survey asked how NGCP can support participants in their work and how they think NGCP can best impact the field moving forward.

NGCP participants reported that NGCP could support them in a variety of ways. The most common suggestions were to provide additional Partner Project opportunities, professional development, and curriculum. Less frequently, NGCP participants mentioned the development and support of a Collaborative in their state or provided other suggestions. Other suggestions for support included: more networking opportunities, either between programs and schools or among NGCP participants/programs; more communication, including two-way communication in which programs update NGCP about their work; and more financial support for programs.

NGCP participants suggested a variety of ways that NGCP could impact the field moving forward, primarily continuing to focus on and facilitate collaboration and share current research and valuable resources. Participants also mentioned developing more and/or strengthening state Collaboratives, increasing advocacy work, and providing more Partner Projects. Some participants

noted the importance of thinking broadly about equity in STEM, including gender-expansive youth and youth who are underrepresented in STEM, and inclusion of diverse role models and perspectives. A number of participants suggested that NGCP keep doing what they have been doing and to “keep up the good work.”

Finally, 32 NGCP participants opted to provide additional information related to their involvement with NGCP, the large majority of which shared a positive comment about NGCP. Respondents encouraged NGCP to “keep up the good work.” Many talked about how they appreciate the impact that NGCP has made on them and/or their programs and organizations, and how they value the connections they have made through the NGCP.

CONCLUSION

Results from the 2022 NGCP Annual Survey provide a snapshot of how NGCP participants have utilized the plethora of resources, training, curriculum, and other opportunities provided by NGCP to increase their reach and impact on girls, and all youth, in STEM. The overwhelming majority of NGCP participants believe that NGCP has positively impacted their practice or program. Throughout the pandemic, survey results demonstrated that many NGCP participants used NGCP resources in new ways to address the changing needs of girls or youth related to virtual and hybrid learning. While it is important to reiterate that survey respondents only comprise a small subsample of the thousands of NGCP participants nationwide, the responses provided here emphasize the importance of the resources disseminated by NGCP to participants from a range of different settings across the United States.

The majority of NGCP participants also noted that both girls’ access to STEM opportunities and the quality of STEM programming for girls have improved over the past decade. Still, they emphasized that there is a great deal more work to be done to further gender equity in STEM, and even provided suggestions for how NGCP can better support its network moving forward. Looking ahead, NGCP plans to integrate many of these suggestions into our work (e.g., providing additional Partner Project opportunities, professional development opportunities, and curriculum). Responses to the NGCP Annual Survey will directly impact and help shape how we continue to serve our network of participants and collaborators with the ultimate goal of transforming the experience for girls, and all youth, in STEM.



Thank you to the NGCP participants who shared their opinions and experiences via the 2022 Annual Survey. We appreciate your participation and feedback.

Thank you to NGCP Anniversary Fellows, Emma Hagen and Hannah Winkler, for their valuable contributions to this report.

For any questions about this report or interest in using any of the findings, please contact Brenda Britsch: bbritsch@ngcproject.org.

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