Great Science for Girls

Program Quality Tool

David P. Weikart Center for Youth Program Quality

Youth PQA

fhi360 THE SCIENCE OF IMPROVING LIVES | Educational Equity Center

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The scales and items that appear on pages 7-13 (Safe Environment, Supportive Environment, Interaction, and Engagement) are drawn from the Youth Program Quality Assessment© which was originally developed and validated by the HighScope Educational Research Foundation. All Youth Program Quality Assessment content included in this document is wholly owned by the Forum for Youth Investment and is reprinted herein for use by the Great Science for Girls community. No other group may distribute, reproduce or otherwise use without the express written consent of the Forum for Youth Investment. The scales and items that appear on pages 14-19 were developed by The Educational Equity Center at FHI 360 specifically for the Great Science for Girls Program Quality Tool.

Program and Rater Information

Name of program offering (activity) observed: _____ Date of observation: _____

Name of staff observed _____

Brief description of program offering _____

_____

_____

Name of site_____ Number of children present_____

Age of children (circle one that best fits):

Kindergarten – 2nd grade	3rd grade – 6th grade	6th grade – 8th grade
Kindergarten – 8th grade	high school	

Type of program/activities offered (please circle all that apply):

Mentoring	Tutoring	Homework Help
Drop-in	Faith-based	Camp
Visual Art	Dance	Drama
Math	Science	Outreach
Prevention	Sports	Life skills development
Leadership development	Service learning	Other

Questions about the program. These questions should be addressed to the lead staff in the offering. This data is being collected for purposes of instrument validation and will not ever be linked to the identity of the staff person being observed. All responses will remain confidential and staff may decline to answer any question.

How many years have you worked in programs like this one?	
	Number of years
How many years have you worked in this program?	
	Number of years
Are you a certified school-day teacher?	☐ Yes ☐ No
Are you a certified social worker?	☐ Yes ☐ No

What is the highest level of education that you have completed? *(check only one)*

☐	GED	☐	High school diploma	☐	Some College but no degree yet/Associate's Degree
☐	Bachelor's Degree	☐	Graduate program but no degree yet	☐	Master's Degree
☐	Doctorate	☐	Other professional degree after BA	☐	None of the above

Which type best describes the site in which the offering is located (*check all that apply*):

☐ Community-based organization (not a school) ☐ Local school (public, charter, or private) ☐ Faith-based organization (Church)

Which type best describes the program model (*check only one*):

☐ After-school program - mix of content ☐ After-school sports only ☐ School-day insert

☐ Mentoring or tutoring ☐ Residential treatment ☐ Court referred / juvenile justice

☐ Alternative school

Introduction

Purpose

Great Science for Girls (GSG), an initiative led by the **Educational Equity Center at FHI 360 and funded by the National Science Foundation, builds the capacity of afterschool centers to provide inquiry-based,** informal science learning programs that will stimulate girls' curiosity, interest and persistence in science, technology, engineering and math (STEM). To assist GSG programs in assessing point-of-service quality, AED commissioned development of an observational assessment tool – the GSG Program Quality Tool -- that combines elements of a research-validated program quality metric (Youth Program Quality Assessment; see appendix for additional details) with a battery of questions that focus on gender equity and scientific inquiry.

Definitions

- *Organization* refers to the agency that operates services for young people. An organization may be a community-based nonprofit agency, a church or temple, a private center, a neighborhood association, or a school.
- *Program cycle* is the time dedicated to a STEM activity, e.g., a semester or 6 weeks.
- *Program offerings* refer to the range of scheduled services available to children at an organization, such as classes, workshops, meetings, special events, homework help, or discussion groups.
- *Session* is one scheduled period of a program offering. For example, the science club meets from 3:00 to 4:00 on Wednesday.
- *Staff* refers to the person or persons facilitating a session. Staff may include paid workers, volunteers, or peer leaders.
- *Activities* are the planned interactions led by staff during a session. For example, the activities that occur during a college preparation club might include conducting mock interviews, journaling, or exploring college Web sites.
- *Domain* refers to the group of items falling under one of the sections I–VII. For example, in *Form A Program Offering Items,* a domain is "I. Safe Environment," which contains the scales A–E.
- *Scale:* items on one page of the GSG Program Quality Tool
- *Form A* contains items and scales that are assessed by direct observation.
- *Form B* contains interview questions assessing organizational, structural, policy and program matters.

SCORING FORM A

Step 1. Observe and/or interview as appropriate. Record supporting evidence as written anecdotal notes in the space provided on the form, on a separate sheet of paper, or on individual sticky notes. Most of your supporting evidence will come from direct observation. It takes an experienced rater a minimum of two to three hours to complete Form A—one to two hours for observation and collection of written evidence and one hour to score the indicator rows.
Your notes should be

- Factual and objective (rather than judgmental, evaluative, or impressionistic)
- Specific and detailed (rather than general)
- Accessible (language should make sense six months from now)
- Chronological (include time markers)

Your notes should include

- Anecdotal descriptions of interactions
- Quotes of what children and/or staff say when interacting
- Actions and language of the children involved
- Materials lists
- Sequences of daily events and routines

Step 2. Ask follow-up questions. At the end of the observation, if you do not observe an indicator during the session, ask the session leader(s) the corresponding follow-up questions (the questions written in the supporting evidence/anecdotes column for some of the indicator rows). Use the answers to the follow-up questions as evidence to score the indicators. If an indicator row does not have a question(s) in the supporting evidence column, you do not need to ask follow-up questions.

TRY TO COMPLETE EVERY INDICATOR ROW FOR EVERY ITEM.

Step 3. Fit and score the supporting evidence on the indicator rows. To determine the appropriate score, read the row of indicators and your evidence. Then, based on your evidence, score the indicator row. Circle the number (1, 3, or 5) of the indicator that best matches your evidence. Write the score in the box at the end of the indicator row. If you recorded your evidence elsewhere, you'll need to match your notes to relevant items on the GSG Program Quality Tool and then *fit* the evidence to the most appropriate indicator row under that item (in the space provided). Always try to cross-reference evidence against multiple indicators—avoid wasting evidence. In most cases, indicators with a score of 5 provide a full listing of relevant evidence. If the evidence box is marked with a "n/o=1," "n/o=3" or "n/o=5" (for *not observed*), and if applicable evidence was not observed, then the row is scored a 1, 3, or 5 as instructed**.** If an indicator row is not applicable or cannot be observed or determined by follow-up questions, place an "X" in the box at the left.

Step 4. Determine the score for each scale.. The scale score is an average of scores (one per indicator row) that fall under each scale. To calculate the scale score, simply add the score for each indicator row (1, 3, or 5) to get the sum and divide by the total number of indicator rows that were scored. Round scale scores to two decimal places. If an indicator row is not applicable or cannot be observed or determined by follow-up or interview questions, calculate the score based on the number of indicators scored for that item. If some indicators are left unscored, you can still attain reliable and valid composite scores. However, to maintain the validity of Youth PQA results, every effort should be made to collect data for every indicator.

Step 5. Determine the score for each domain. The domain scores are averages of each of the corresponding scale scores. Transfer scale scores from the scale pages to the summary sheet at the end of this form. Use the summary sheet in each form to total the scale scores within each domain. Calculate average scores for each of the domain by dividing the sum by the number of items scored in that domain. Round average scores to two decimal places. Note: If none of the indicators can be scored for a scale, enter "NS" on the summary sheet for that scale and remember to divide by the number of items *actually scored* for that domain.

I. Safe Environment*

I-A. Psychological and emotional safety is promoted.

	Indicators				Supporting Evidence/Anecdotes
1	**1** The emotional climate of the session is predominantly negative (e.g., disrespectful, tense, exclusive, even angry or hostile; with negative behaviors, such as rudeness, bragging, insults, "trash talking," negative gestures, or other such actions that are not mediated by either youth or staff).	**3** The emotional climate of the session is neutral or characterized by both positive and negative behaviors.	**5** The emotional climate of the session is predominantly positive (e.g., mutually respectful, relaxed, supportive; characterized by teamwork, camaraderie, inclusiveness, and an absence of negative behaviors). Any playful negative behaviors (not considered offensive by parties involved) are mediated (countered, curtailed, defused) by staff or youth.	☐	n/o = 3
2	**1** Comments or slurs intended to hurt someone who is present explicitly indicate religious, ethnic, class, gender, ability, appearance, or sexual orientation bias(es).	**3** There is evidence (e.g., comments or slurs) of religious, ethnic, class, gender, ability, appearance, or sexual orientation bias, but comments are not directed at anyone present.	**5** There is no evidence of bias but rather there is mutual respect for and inclusion of others of a different religion, ethnicity, class, gender, ability, appearance or sexual orientation.	☐	n/o = 5

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

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II. Supportive Environment*

II-H. Activities support active engagement.

	Indicators				Supporting Evidence/Anecdotes
1	**1** The activities provide no opportunities for youth to engage with either materials **or** ideas or to improve a skill through guided practice; activities mostly involve waiting, listening, watching, and repeating.	**3** The activities provide limited opportunities for youth to engage with materials **or** ideas or to improve a skill though guided practice.	**5** The bulk of the activities involve youth in engaging with (creating, combining, reforming) materials **or** ideas or improving a skill through guided practice.	☐	
2	**1** The activities do not (will not) lead to tangible products or performances.	**3** The activities lead (or will lead) to tangible products or performances but do not reflect ideas or designs of youth (e.g., only staff's ideas are reflected).	**5** The program activities lead (or will lead in future sessions) to tangible products or performances that reflect ideas or designs of youth.	☐	
3	**1** The activities provide no opportunities for youth to talk about (or otherwise communicate) what they are doing and what they are thinking about to others.	**3** The activities provide at least one opportunity for some youth to talk about (or otherwise communicate) what they are doing and what they are thinking about to others.	**5** The activities provide all youth one or more opportunities to talk about (or otherwise communicate) what they are doing and what they are thinking about to others.	☐	
4	**1** The activities focus almost exclusively on abstract concepts, providing limited or no related concrete experiences.	**3** The activities focus almost exclusively on concrete experiences, providing limited or no opportunities to engage with related abstract concepts.	**5** The activities balance concrete experiences involving materials, people, and projects (e.g., field trips, experiments, interviews, service trips, creative writing) with abstract concepts (e.g., lectures, diagrams, formulas).	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

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II. Supportive Environment*

II-I. Staff support youth in building new skills.

	Indicators				Supporting Evidence/Anecdotes
1	**1** Youth are not encouraged to try out new skills or attempt higher levels of performance.	**3** Some youth are encouraged to try out new skills or attempt higher levels of performance but others are not.	**5** All youth are encouraged to try out new skills or attempt higher levels of performance.	☐	
2	**1** Some youth who try out new skills with imperfect results, errors, or failure are informed of their errors (e.g., "That's wrong") and/or are corrected, criticized, made fun of, or punished by staff *without* explanation.	**3** Some youth who try out new skills receive support from staff who problem-solve with youth despite imperfect results, errors, or failure, and/ or some youth are corrected *with* an explanation.	**5** All youth who try out new skills receive support from staff despite imperfect results, errors, or failure; staff allow youth to learn from and correct their own mistakes and encourage youth to keep trying to improve their skills.	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

II. Supportive Environment*

II-J. Staff support youth with encouragement.

*Note: **Open-ended questions** are questions without predetermined, correct answers that seek the opinions, thoughts, and ideas of youth.*

	Indicators				Supporting Evidence/Anecdotes
1	**1** During activities, no staff are actively involved with youth except for brief introductions, endings, or transitions (e.g., they are physically separated from youth or do not interact with them).	**3** During activities, staff (or some of the staff) are sometimes, or intermittently, actively involved with youth.	**5** During activities, staff are almost always actively involved with youth (e.g., they provide directions, answer questions, work as partners or team members, check in with individuals or small groups).	☐	
2	**1** Staff do not support contributions or accomplishments of youth in either of the ways described for a score of 3 or 5, or simply don't support youth at all.	**3** Staff do support many contributions or accomplishments of youth but use subjective or evaluative comments, such as "Good job!" "I like it!" "You're so smart!"	**5** Staff support at least some contributions or accomplishments of youth by acknowledging what they've said or done with specific, nonevaluative language (e.g., "Yes, the cleanup project you suggested is a way to give back to the community." "I can tell from the audience response that you put a lot of thought into the flow of your video").	☐	
3	**1** Staff rarely or never ask open-ended questions.	**3** Staff make limited use of open-ended questions (e.g., only use them during certain parts of the activity or repeat the same questions).	**5** Staff make frequent use of open-ended questions (e.g., staff ask open-ended questions throughout the activity and questions are related to the context).	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

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III. Interaction*

III-M. Youth have opportunities to participate in small groups.

Note: (a) ***Full group*** *refers to all the participants present for the session. (b)* ***Small group*** *refers to divisions of the full group into smaller subgroups including pairs. (c) When scoring, do not count perfunctory gatherings of the full group, such as for imparting directions, as distinct groupings.*

	Indicators				Supporting Evidence/Anecdotes
1	**1** Session involves only one grouping—full, small, or individual.	**3** Session consists of activities carried out in 2 different groupings—full, small, or individual.	**5** Session consists of activities carried out in at least 3 groupings—full, small, or individual.	☐	
2	**1** Staff do not form small groups for activities.	**3** Staff use one way to form small groups.	**5** Staff use 2 or more ways to form small groups (e.g., lining up by category and counting off, grouping by similarities, signing up).	☐	
3	**1** Staff do not use small groups for activities.	**3** Some or all small groups lack a purpose, **or** some group members do not cooperate in accomplishing the purpose.	**5** Each small group has a purpose (i.e., goals or tasks to accomplish), **and** all group members cooperate in accomplishing it.	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

IV. Engagement*

IV-P. Youth have opportunities to set goals and make plans.

If you do not observe an indicator, ask the corresponding follow-up questions.

	Indicators				Supporting Evidence/Anecdotes
1	**1** Youth do not have opportunities to make plans for projects or activities.	**3** Youth have at least one opportunity to make plans for a project or activity (individual or group).	**5** Youth have multiple opportunities to make plans for projects and activities (individual or group).	☐	*In reference to today's program offering, did the youth do any planning in prior sessions? n/o=1*
2	**1** There is no planning for projects or activities, **or** no identifiable planning strategies are used.	**3** When planning projects or activities, at least one identifiable planning strategy is used.	**5** In the course of planning the projects or activities, 2 or more planning strategies are used (e.g., brainstorming, idea webbing, backwards planning).	☐	*In reference to planning for today's program offering, how did you help youth make plans?*

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

IV. Engagement*

IV-R. Youth have opportunities to reflect.

Note: (a) ***Reflect*** *means to review, summarize, and/or evaluate recent events or activities.* ***Reflections*** *are usually expressed by talking with others and/or in writing, for example, a journal or report. (b)* ***Structured*** *refers to the quality of being intentional, planned, and/or named; it does not refer to informal conversation.*

	Indicators				Supporting Evidence/Anecdotes
1	**1** No youth are engaged in an intentional process of reflecting on what they are doing or have done.	**3** Some youth are engaged in an intentional process of reflecting on what they are doing or have done.	**5** All youth are engaged in an intentional process of reflecting on what they are doing or have done (e.g., writing in journals; reviewing minutes; sharing progress, accomplishments, or feelings about the experience).	☐	
2	**1** Some or all youth are not given the opportunity to reflect on their activities.	**3** All youth are given the opportunity to reflect on their activities in at least one way.	**5** All youth are given the opportunity to reflect on their activities in 2 or more ways (e.g., writing, role playing, using media or technology, drawing).	☐	
3	**1** No youth have structured opportunities to make presentations to the whole group.	**3** Some youth have structured opportunities to make presentations to the whole group.	**5** In the course of the program offering, all youth have structured opportunities to make presentations to the whole group.	☐	
4	**1** Staff dismiss feedback from youth who initiate it, or youth have no opportunities to provide feedback on the activities.	**3** Staff are receptive to feedback initiated by youth on the activities but do not solicit it.	**5** Staff initiate structured opportunities for youth to give feedback on the activities (e.g., staff ask feedback questions, provide session evaluations).	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

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V. Great Science for Girls Observational Best Practices

A. Activities support scientific inquiry.

	Indicators				Supporting Evidence/Anecdotes
1	**1** Youth do not have an opportunity to observe phenomena and document their observations.	**3** Some youth have an opportunity to observe phenomena and document their observations.	**5** All youth have an opportunity to observe phenomena and document their observations.	☐	
2	**1** Youth do not have an opportunity to form a hypothesis.	**3**. Some youth have an opportunity to form a hypothesis.	**5** All youth have an opportunity to form a hypothesis.	☐	
3	**1** Youth do not have an opportunity to discuss the science that they are learning.	**3** Some youth have an opportunity to discuss the science that they are learning.	**5** All youth have an opportunity to discuss the science they are learning (to create a "youth voice" and bring ownership to the process).	☐	
4	**1** Staff interactions do not encourage youth to follow the scientific process, (e.g. focused exclusively on the result or achieving the correct answer).	**3** Staff interactions encourage some youth to follow the scientific process.	**5** Staff interactions encourage all youth to follow the scientific process (i.e. observing, testing hypotheses, making conclusions based on those tests).	☐	
5	**1** Staff do not ask challenging questions.	**3** Staff ask 1 or 2 challenging questions ("Why" and "How" questions, not just "what" questions).	**5** Staff ask 3 or more challenging questions (e.g., questions that make youth think, require more than a quick answer, require youth to analyze, evaluate, make connections).	☐	
6	**1** Staff do not allow youth to take an activity in a new or unplanned direction.	**3** Staff allow youth to take an activity in a new or unplanned direction, but also do not actively encourage youth in this process (e.g., s "I really think my way is better, but if you want to do it this way, go ahead").	**5** Staff actively encourage youth to take an activity in a new or unplanned direction (e.g., "Can you think of another way to do this or how we might change this activity to make it more interesting?"). Staff support youth's suggestions.	☐	
7	**1** Staff make discouraging or disparaging comments about STEM, such as "This is hard. Math is boring."	**3** Staff do not appear enthusiastic about STEM, but do not make disparaging remarks about STEM. "	**5** Staff appear enthusiastic about STEM and do not make disparaging remarks about STEM.	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

V. Great Science for Girls Observational Best Practices

B. Staff interactions support gender equity.

	Indicators				Supporting Evidence/Anecdotes
1	**1** Staff assign tasks consistently along gender stereotypes (e.g., only boys are given leadership roles and only girls are asked to observe and take notes).	**3** Staff do not assign tasks based on gender stereotypes but do not intervene when youth choose gender stereotypical roles (e.g., boys volunteer for leadership roles and girls volunteer to take notes).	**5** Staff actively challenge gender stereotypes in assigning tasks (e.g., girls are first to be given a leadership role or conduct the hands-on activities, while boys are asked to observe and take notes).	☐	
2	**1** Staff compliment girls only on their appearance, personality (e.g., being "nice" or "sweet").	**3** Staff encourage girls' contributions and accomplishments but also compliment girls on their appearance or their personality.	**5** Staff encouragement of girls is exclusively focused on their contributions and accomplishments, rather than on their appearance or personality, and done with specific, non-evaluative language (e.g., "I can tell from your presentation that you put a lot of thought into your structure's design").	☐	
3	**1** Staff do not encourage girls to participate in meaningful roles with responsibilities (e.g. allow more assertive students to crowd out others, especially girls, from participating.)	**3** Staff encourage some girls to participate in meaningful roles with responsibilities.	**5** Staff encourage all girls to participate in meaningful roles with responsibilities (e.g., noticing if girls have not fully participated, coaxing more reticent students to participate).	☐	
4	**1** Staff actively discourage girls from being assertive, (e.g., by punishing or ignoring girls that speak out of turn or express strong opinions).	**3** Staff do not discourage girls from being assertive, but also do not actively encourage them.	**5** Staff actively encourage girls to speak up and be assertive (e.g., by calling on girls, assigning leadership roles to girls and encouraging girls who express strong opinions).	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

Form B Organizational Best Practices: Interview Format

Introduction

The following domains focus on program quality at the organizational level and assess the quality of *organizational supports* for the youth program offerings assessed. For raters using the program self-assessment method, the evidence is assembled and reviewed by an in-house team of administrators and staff. A review of documents may be necessary.

Step 1

Pre-interview. Begin by arranging for administrative staff to meet and score the items. There may be a need to gather documents detailing policies and practices.

Step 2

Score the item rows. A staff team (including the administrator) can simply use Form B to gather evidence and score the item rows. For the self-assessment method, scores for each indicator row should be selected through a discussion of the evidence and a consensus decision by the review team.

VI. Great Science for Girls Organizational Best Practices

A. Program activities expose youth to STEM careers.

	Indicators				Supporting Evidence/Anecdotes
1	**1** Within each program cycle, staff do not intentionally introduce and explore STEM careers.	**3** Within each program cycle, staff intentionally introduce and explore STEM careers at least once.	**5** Within each program cycle, staff intentionally introduce and explore STEM careers on multiple occasions.	☐	
2	**1** There are no opportunities within the program cycle for youth to engage in activities that reflect STEM careers.	**3** Within each program cycle, there is at least one opportunity for youth to engage in activities that reflect STEM careers.	**5** Within each program cycle, there are multiple opportunities for youth to engage in activities that reflect STEM careers.	☐	
3	**1** There are no opportunities in the program cycle for field trips to locations where people are engaged in STEM work.	**3** Within each program cycle, there is at least one opportunity for a field trip to locations where people are engaged in STEM work.	**5** Within each program cycle, there are multiple opportunities for field trips to locations where people are engaged in STEM work	☐	
4	**1** There are no opportunities in the program cycle for youth to be exposed to guest speakers or facilitators who have careers in STEM.	**3** Within each program cycle there is at least one opportunity for youth to be exposed to guest speakers or facilitators who have careers in STEM.	**5** Within each program cycle there are multiple opportunities for youth to be exposed to guest speakers (in person or on-line) or facilitators who have careers in STEM.	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

VI. Great Science for Girls Organizational Best Practices

B. Organization policies promote gender equity.

	Indicators				Supporting Evidence/Anecdotes
1	**1** The content of program activities conform to gender stereotypes (e.g., cooking for girls, sports for boys).	**3** The content of program activities is not gendered but there is not a policy in place to prevent youth from selecting activities according to gender stereotypes (e.g., only girls select cooking).	**5** There are policies in place to encourage youth to participate in non-gender stereotyped activities (e.g., all youth are required to take cooking or girls are specifically recruited for science).	☐	
2	**1** Youth are not exposed to women and people from other underrepresented groups who have STEM careers or this exposure is limited to one or two people.	**3** Less than half of the materials, guest speakers, or displays expose youth to women and people from other underrepresented groups who have STEM careers.	**5** The majority of guest speakers, displays, and materials expose youth to women and people from other underrepresented groups who have STEM careers.	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

VI. Great Science for Girls Organizational Best Practices

C. Organization builds connections with families.

	Indicators				Supporting Evidence/Anecdotes
1	**1** No communication occurs with most families of youth participants.	**3** Communication with families of youth participants is informal or irregular.	**5** Organization has established mechanisms to communicate with families of youth participants (e.g., newsletters, email, conferences, group meetings, dinners, picnics, informal discussions at pick-up time).	☐	
2	**1** There are no opportunities in place to engage families in the content of the program.	**3** There is at least one structured opportunity in place to engage families in the content of the program.	**5** There are multiple structured opportunities in place to engage families in the content of the program (e.g., parent information booklets, program orientation meeting, youth presentations on their work, open house nights, at-home science activities).	☐	
3	**1** Organization does not acknowledge or attempt to remove barriers to family participation.	**3** Organization sometimes removes barriers to family participation.	**5** Organization removes barriers to family participation (e.g., accounting for parent's availability in scheduling, allowing siblings to participate with families, providing at-home activities for families and youth to engage in).	☐	
4	**1**There are no structured opportunities for families to have a decision-making role in program/activity planning.	**3** There is at least one structured opportunity for families to have a decision-making role in the program/activity planning.	**5** There are multiple opportunities for families to have input in program/activity planning (e.g., parents serve on planning committees or advisory board, parent feedback surveys are done periodically).	☐	

Sum ☐ **÷** ☐ **number of indicators scores =** ☐ **item score**

Great Science for Girls
Program Quality Tool
Summary Sheet

Fill out the following information. Transfer the Item Score (rounded to two decimal places) into the corresponding blank. If an item was not scored, enter "NS", and in calculating the average score, remember to divide the number by the number of items actually scored for that subscale. Refer to the scoring instructions on page 6.

Organization Information

Name of organization -

_____

Name of site

_____

Name of program offering being observed

_____

_____

_____

Date/Time of Observation

Date/Time of Observation -

_____

I. Safe Environment

_____ A. Psychological and emotional safety is promoted.

II. Supportive Environment

_____ H. Activities support active engagement.

_____ I. Staff support youth in building new skills.

_____ J. Staff support youth with encouragement.

III. Interaction

_____ M. Youth have opportunities to participate in small groups.

IV. Engagement

_____ P. Youth have opportunities to set goals and make plans.

_____ R. Youth have opportunities to reflect.

V. Great Science for Girls Observational Best Practices

_____ A. Activities support scientific inquiry.

_____ B. Staff interactions support gender equity.

VI. Great Science for Girls Organizational Best Practices

_____ A. Program activities expose youth to STEM careers.

_____ B. Organization policies promote gender equity.

_____ C. Organization builds connections with families.

APPENDIX

The Youth Program Quality Assessment Tool

Based on content originally developed at the HighScope Foundation, the David P. Weikart Center's Youth Program Quality Assessment (Youth PQA) is a validated instrument designed to evaluate the quality of youth programs and identify staff training needs. It consists of a set of scorable standards for best practices in after-school programs, community organizations, schools, summer programs, and other places where children have fun, work, and learn with adults. The Youth PQA is designed to empower people and organizations by helping them to envision optimal-quality youth programming, by providing a shared language for practice and decision making, and by producing scores that can be used for comparison and assessment of progress over time. The Youth PQA measures the quality of child experiences and promotes the creation of environments that tap the most important resource available to any youth-serving organization—a young person's motivation to engage critically with the world. The Youth PQA is an assessment tool for best practices for any youth-serving program

Benefits

Key features of the Youth PQA are:

- Experience–tested approach—The standards for best practices that make up the Youth PQA are grounded in extensive experience working with young people. Together, the items in the instrument represent a youth development approach that works.
- Research-based rubrics—The Youth PQA contains proven measurement rubrics that allow observers to differentiate programs in important and meaningful ways.
- Opportunities to observe practice—Staff using the Youth PQA must spend time watching what happens in their program.
- Flexibility—The Youth PQA was designed to meet a range of accountability and improvement needs, from self-assessment to research and evaluation.

DAVID P. WEIKART CENTER FOR YOUTH PROGRAM QUALITY

Youth PQA

The GSG Quality Assessment includes 7 scales from the Youth PQA. A complete list of Youth PQA scales is provided below.

YOUTH PQA SCALES

I. Safe Environment

A. Psychological and emotional safety is promoted.

B. The physical environment is safe and free of health hazards.

C. Appropriate emergency procedures and supplies are present.

D. Program space and furniture accommodate the activities.

E. Healthy food and drinks are provided.

II. Supportive Environment

F. Staff provide a welcoming atmosphere.

G. Session flow is planned, presented, and paced for youth.

H. Activities support active engagement.

I. Staff support youth in building new skills.

J. Staff support youth with encouragement.

K. Staff use youth-centered approaches to reframe conflict.

III. Youth Interaction

L. Youth have opportunities to develop a sense of belonging.

M. Youth have opportunities to participate in small groups.

N. Youth have opportunities to act as group facilitators and mentors.

O. Youth have opportunities to partner with adults.

IV. Engagement

P. Youth have opportunities to set goals and make plans.

Q. Youth have opportunities to make choices based on their interests.

R. Youth have opportunities to reflect.

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For a downloadable copy of the GSG Program Quality Tool and Manual, please visit the GSG website:

www.greatscienceforgirls.org

Great Science for Girls (GSG) is a five-year initiative, funded by the National Science Foundation, to enhance the capacity of after-school programs to provide quality gender equitable STEM opportunities. Through the GSG website, you will find virtual support: resources, research, downloadable "take action" tools and an online network to share questions, additional resources, and experiences.

To learn more about the full Youth PQA and its related program quality improvement practices and services, please contact the:

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