STEM PQA
Performance Report

Prepared for: East High 9 to 12
(Boys and Girls Club of Greater St. Louis / Missouri AfterSchool Network)

Type: External Assessment

Date prepared: 11 / 23 / 2021

This report describes the results of a Program Quality Assessment (PQA). This introduction will give you an overview of what is contained in your performance report and how you might use it to plan for improvement.

When you are interpreting your performance report, here are a few tips to keep in mind:

- The performance data is given to help you improve your program.
- The conversations that you have with your site team regarding improvement efforts are most important.
- Comparisons against other data sets are available to give you context to understand your own scores.

Follow this suggested sequence for reading and interpreting your performance report:

1. Examine the domains, scales, and items presented in the report. Consider: What scales and items make up each domain? What are the instructional practices that are measured by the assessment?
2. Celebrate your strengths! Identify the items that you feel are successes in your program. What factors do you think contribute to these strengths?
3. What can you work on? After you have identified which items you think could use improvement, refer to the corresponding practice descriptions in the PQA. Reflect on what might be causing some of your scores to be lower than you would like and brainstorm what steps you could take to improve in this area.

If you have questions regarding your report, please do not hesitate to contact the David P. Weikart Center for Youth Program Quality: scoresreporter@cypq.org

PQA scores range from 1.0 to 5.0. In general, scores can be interpreted as follows:

Score of 1 = The practice is not in place
Score of 3 = The practice is available to a limited extent or in a less advanced form
Score of 5 = The practice is widely available and/or with great frequency

Scores between 4.0 and 5.0 are excellent in most categories. Scores between 1.0 and 2.0 can be a general cause for concern. Low scores on your performance report (relative to other scores in the report) may suggest areas of potential improvement.

The scores on your report reflect one of two methods - self assessment or external assessment. Self assessment is a team-based process where multiple program offerings are observed and as a result of a consensus meeting, one set of program-wide scores is submitted. For external assessment, a trained, reliable external assessor will observe a single program offering and score a PQA based on the observation.

To complete the assessment, a rater may decide to mark certain items with an "X" or an "NS", as instructed in the instrument. A mark of an "X" indicates that a specific practice was not able to be scored during the program offering (e.g. Reframing Conflict if no conflict situation was observed). Alternatively, a site may decide in advance not to score specific practices because they are not relevant to the program offering (e.g. fire extinguisher in a virtual program) and mark with an "NS". Those items are excluded from the scale and domain averages, so as not to negatively impact the scores.

When more than half of the items within a scale are unscored, there is not enough available data to calculate a valid scale score. Similarly, when more than half of the scales within a domain are unable to be scored, there is not enough available data to calculate a valid domain score. Throughout this report, those situations will be identified by N/A.

This performance report presents scores at three levels - domain, scale, and item.

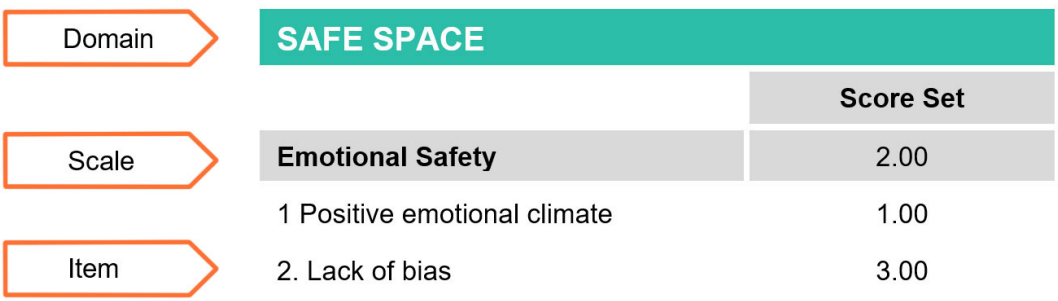
Domain Scores — Each domain consists of a group of related scales. The first graph presents the domains associated with the PQA used.

Scale Scores — Each scale is composed of specific items corresponding to evidence-based practices for that domain. The first table presents the scales that make up the domain.

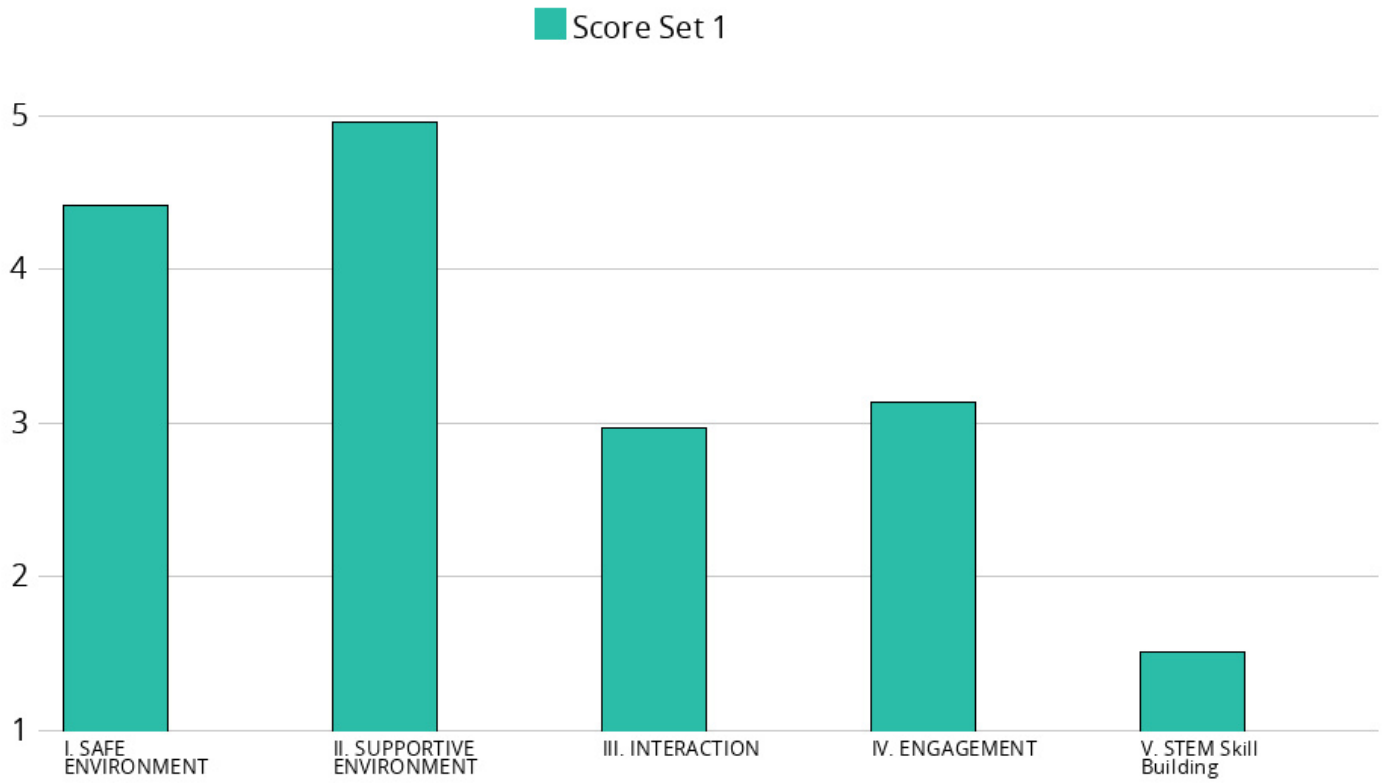
Item Scores — Items represent performance at the level of practice. The second table presents the scores for each item. While the item names in the report are abbreviated, you can view full practice descriptions in the appropriate version of the PQA.

Scores are calculated using averages. Scales are averages of items and domains are averages of calculated scales. Each average is unweighted, meaning that each item and scale contributes equally to the overall average. The Total score at the bottom of the table is the unweighted average of the domain scores. For aggregate reports of multiple PQA entries (e.g. a network report), scale scores and domain scores are calculated for each entry separately and then averaged together.

Figure 1. Sample performance report with labels



Program Observation Summary



Observation Identification	
	Score Set # 1
Tags:	External East High 9 to 12

Observation Details	
	Score Set # 1
PQA:	STEM PQA
Date:	11/17/2021
Forms:	1 form
Offering:	Check-in Power Hour-STEM activity Dinner-Chill Zone Diplomas to Degrees Vision Board

Summary Report

	Score Set 1
I. SAFE ENVIRONMENT	**4.40**
Emotional Safety	4.00
Healthy Environment	5.00
Emergency Preparedness	3.00
Accommodating Environment	5.00
Nourishment	5.00
II. SUPPORTIVE ENVIRONMENT	**4.94**
Warm Welcome	5.00
Session Flow	5.00
Active Engagement	5.00
Staff support youth in Skill-Building	4.71
Encouragement	5.00
III. INTERACTION	**2.96**
Belonging	3.50
Collaboration	1.00
Leadership	2.33
Adult Partners	5.00
IV. ENGAGEMENT	**3.13**
Planning	1.00
Choice	5.00
Reflection	3.00
Connections	3.50
V. STEM Skill Building	**1.50**
Scientific Reasoning	1.00
Observation and Measurement	1.50
Representation	2.00

Detailed Report

I. SAFE ENVIRONMENT

		Score Set 1
Emotional Safety		**4.00**
1	Positive emotional climate	3.00
2	Lack of bias	5.00
Healthy Environment		**5.00**
1	Free of health and safety hazards	5.00
2	Clean and sanitary	5.00
3	Adequate ventilation and lighting	5.00
4	Comfortable temperature	5.00
Emergency Preparedness		**3.00**
1	Posted emergency procedures	3.00
2	Accessible fire extinguisher	1.00
3	Visible first-aid kit	3.00
4	Appropriate safety equipment	X
5	Supervised indoor entrances	5.00
6	Supervised access to outdoors	X
Accommodating Environment		**5.00**
1	Sufficient Space	5.00
2	Suitable Space	5.00
3	Enough comfortable furniture	5.00
4	Flexible physical environment	5.00
Nourishment		**5.00**
1	Available drinking water	5.00
2	Plentiful food and drink	5.00
3	Nutritious food and drink	5.00

II. SUPPORTIVE ENVIRONMENT

		Score Set 1
Warm Welcome		**5.00**
1	Youth greeted	5.00
2	Staff warm and respectful	5.00
3	Positive staff body language	5.00
Session Flow		**5.00**
1	Starts and ends on time	5.00
2	Materials ready	5.00
3	Sufficient materials	5.00
4	Explains activities clearly	5.00
5	Appropriate time for activities	5.00
Active Engagement		**5.00**
1	Youth engage with materials or ideas	5.00
2	Youth talk about activities	5.00
3	(Y) Balance concrete and abstract	5.00
4	(Y) Tangible products or performances	5.00
Staff support youth in Skill-Building		**4.71**
1	Learning focus linked to activity	5.00
2	Staff encourages youth to try skills	5.00
3	Staff models skills	5.00
4	Staff breaks down tasks	5.00
5	Support for struggling youth	5.00
6	(S) Staff attribute STEM success to effort	5.00
7	(S) Staff Ã¢â‚¬â€œyouth dialogue is present	3.00
Encouragement		**5.00**
1	Staff uses non-evaluative language	5.00
2	Staff asks open-ended questions	5.00
3	(Y) Staff actively involved	5.00
4	(S) Staff encourage creativity	5.00

III. INTERACTION

		Score Set 1
Belonging		**3.50**
1	Opportunities for youth to get to know each other	5.00
2	Inclusive relationships	5.00
3	Youth identify with program	3.00
4	(Y) Public acknowledgement of achievements	1.00
Collaboration		**1.00**
1	(Y) Opportunities to work cooperatively	1.00
2	(Y) Interdependent roles	1.00
3	(Y) Shared goals	1.00
Leadership		**2.33**
1	(Y) Practice group process skills	5.00
2	(Y) Mentoring opportunities	1.00
3	(Y) All youth lead group	1.00
Adult Partners		**5.00**
1	(Y) Staff shares control with youth	5.00
2	(Y) Expectations explained	5.00

IV. ENGAGEMENT

		Score Set 1
Planning		**1.00**
1	(Y) Opportunities to make plans	1.00
2	(Y) Multiple planning strategies used	1.00
3	(S) Staff encourage program goal setting	1.00
4	(S) Preliminary design opportunities	1.00
Choice		**5.00**
1	(Y) Content alternatives	5.00
2	(Y) Process alternatives	5.00
Reflection		**3.00**
1	Intentional reflection	5.00
2	Multiple reflection strategies	3.00
3	Structured opportunities to provide feedback	3.00
4	(Y) Structured opportunities to present to the group	1.00
Connections		**3.50**
1	(S) Staff connect activities with prior knowledge	5.00
2	(S) Staff connect activities to societal/ethical issues	1.00
3	(S) Staff connect activities to career prep	5.00
4	(S) Staff connect STEM concepts	3.00

V. STEM Skill Building

		Score Set 1
Scientific Reasoning		**1.00**
1	(S) Staff support youth in identifying a guiding question	1.00
2	(S) Staff support scientific method or STEM design process	1.00
3	(S) Staff ask youth to make predictions, conjectures or hypothesis	1.00
4	(S) Staff support youth in using a simulation, experiment or model	1.00
5	(S) Staff support youth in analyzing data	1.00
Observation and Measurement		**1.50**
1	(S) Staff support youth in collecting data/measurements	1.00
2	(S) Staff support youth in recording data/observations	1.00
3	(S) Staff support youth in using tools	1.00
4	(S) Staff highlight value of precision and accuracy	3.00
Representation		**2.00**
1	(S) Staff model use of STEM vocabulary	5.00
2	(S) Staff encourage youth in use of STEM vocabulary	1.00
3	(S) Staff support youth in using classification/abstraction	1.00
4	(S) Staff support youth in conveying STEM concepts through symbols/models	1.00

VI. STAFF INTERVIEW

		Score Set 1
Program Preparation		**4.67**
1	(S) Staff create lesson plans	5.00
2	(S) Staff identifies instructional goals	5.00
3	(S) Staff links STEM to school-day content	5.00
4	(S) Staff have knowledge of youth accomplishments	5.00
5	(S) Safety polices related to STEM are enforced	5.00
6	(S) Staff expose youth to people/places using STEM	3.00
Project-Based		**1.00**
1	(S) STEM activity is connected to multi-session project	1.00
2	(S) Youth participate in multi-session project	1.00

Supporting Evidence/Anecdotes

I. SAFE ENVIRONMENT

Emotional Safety

1 Positive emotional climate

Staff worked to create a positive emotional climate. All youth were not always respectful to themselves and youth were not always respectful to the staff. One youth on several occasions did not initially follow directions, used swear words, or put himself down. Staff always responded in a positive tone, helped focus on what the youth was supposed to be doing, and found something positive about the youth or the youth's actions to build upon.

2 Lack of bias

There was no evidence of bias observed.

Healthy Environment

1 Free of health and safety hazards

There were no health or safety hazards observed.

2 Clean and sanitary

The program space was clean and sanitary.

3 Adequate ventilation and lighting

Ventilation and lighting were both adequate and there were no complaints from the youth.

4 Comfortable temperature

The temperature appears comfortable for youth and there were no complaints from the youth about the temperature.

Emergency Preparedness

1 Posted emergency procedures

Emergency procedures were not posted but were available in program office.

2 Accessible fire extinguisher

There was a fire extinguisher accessible in the hallway outside of program spaces. The fire extinguisher inspection date expired in July 2020.

3 Visible first-aid kit

There was an accessible first-aid kit in the program office.

4 Appropriate safety equipment

There were no activities observed that required special safety equipment.

5 Supervised indoor entrances

All building exits are locked during the program hours. When parents arrive to pick-up the youth's name is announced on the loud speaker and a staff person walks the youth to an exit door.

6 Supervised access to outdoors

No outside space was used during the visit.

Accommodating Environment

1 Sufficient Space

There was ample space for youth and staff.

2 Suitable Space

The program spaces were suitable for all observed program activities.

3 Enough comfortable furniture

There was enough furniture for the youth and staff present at all program offering and the youth appeared to be comfortable.

4 Flexible physical environment

The tables and chairs can be moved if needed.

Nourishment

1 Available drinking water

The program makes available bottled water. The hall water fountains have been modified so that youth can fill water bottles.

2 Plentiful food and drink

There was ample food and drink for the three youth present. One youth took dinner and snack with him when he needed to leave near the beginning of dinner.

3 Nutritious food and drink

The program offered nutritious food and drink. The choices included: turkey and cheese sandwiches, string cheese, carrots, apple juice, apple sauce, Doritos, animal crackers, and milk.

II. SUPPORTIVE ENVIRONMENT

Warm Welcome

1 Youth greeted

All youth were greeted. During the check-in, each youth were asked to share, "If your mood was a weather, what weather would it be?" Staff discussed with youth what their weather choices had to say about how they were currently feeling.

2 Staff warm and respectful

All staff were warm and respectful to all youth.

3 Positive staff body language

Staff sit with, lean over, and look youth in the eye when talking with youth. Staff frequently smile and nod approval as youth share their thoughts.

Session Flow

1 Starts and ends on time

The program started at 2:30. The program ended at 4:28 p.m. because the last youth had to leave. Staff had activities planned until the end of the program schedule at 6:00 p.m.

2 Materials ready

All materials were available (already set up) when it was time for each program session.

3 Sufficient materials

There were enough materials for all youth to participate in the activity.

4 Explains activities clearly

Staff clearly explained the activities. Staff provided additional instructions and demonstrated or provided examples as needed to help assure the youth understood the activities.

5 Appropriate time for activities

The amount of time allocated for each activity gave the youth enough time to complete the activity and kept youth engaged in the activity during the allotted time.

Active Engagement

1 Youth engage with materials or ideas

The youth were engaged with ideas and materials in each program sessions. During check-in the youth discussed ways to practice self care and then the youth chose a self care activity. Youth were engaged in a discussion about chemical reactions and participated in a chemical reaction activity. Youth discussed post secondary educational opportunities and wrote examples on chart paper. There was also a discussion of one's visions and dreams. The youth present participated until it was time for him to leave.

2 Youth talk about activities

Staff asked each youth to share their thoughts/ideas/experiences with self-care, asked youth questions about the STEM activity, and facilitated discussion during the post-secondary education activity.

3 (Y) Balance concrete and abstract

Each session provided a balance of concrete and abstract activities. During check-in the youth discussed ways to practice self care and then the youth chose a self care activity. Youth were engaged in a discussion about chemical reactions and participated in a chemical reaction activity. Youth discussed post secondary educational opportunities and wrote examples on chart paper.

4 (Y) Tangible products or performances

There is no formal presentation either during the session or planned for the future of what the youth created. Each activity had a tangible product that was shared during the activity through questions by the staff to each youth.

Staff support youth in Skill-Building

1 Learning focus linked to activity

Staff were informed of the specific learning objective at the beginning of each program session and the activity was directly related to the objective. For example: Wellness Wednesday - To identify an intentional act designed to recharge ourselves Stem Activity- You're going to blow up a balloon without using your breath. You are going to use a chemical reaction. Diplomas to Degrees- We are going to identify post-secondary educational opportunities in four categories. The categories are Technical-Vocational, Military, 2 year/4 year colleges, and Job Corpsw

2 Staff encourages youth to try skills

During the STEM activity when youth did not mix ingredients correctly, a staff person said to all youth, " Many scientists had a lot of failure before they learned something. When you make a mistake, learn from it, and try again.

3 Staff models skills

The staff person showed the youth how to do each step of the experiment. The staff person who led the Visioning Activity, showed the youth a picture of the Visioning poster she made.

4 Staff breaks down tasks

The STEM experiment was done one step at a time.

5 Support for struggling youth

During the STEM activity when youth did not mix ingredients correctly, a staff person said to all youth, " Many scientists had a lot of failure before they learned something. When you make a mistake, learn from it, and try again. "If something you try didn't work, that's good to, because you learn that something does not work and so you can try something else."

6 (S) Staff attribute STEM success to effort

Staff highlight youth effort and attribute success to effort. For example: -" I see that you put a lot of thought into this lesson." After the STEM activity, one youth said she was going to make a stress ball. The staff person said, " That could be a part of your self-care."

7 (S) Staff Ã¢â‚¬â€œyouth dialogue is present

A staff person had a back and forth dialogue with each of the three youth in attendance. One discussion was a back and forth discussion about the youth's choice of weather to to describe his mood. One was a back and forth discussion about 2 year and 4 year colleges. One was a back and forth discussion about what a person does for self-care.

Encouragement

1 Staff uses non-evaluative language

Staff frequently used non-evaluative language commenting specifically on what the student had said or done. For example: " I really like that idea. I'm going to write it down as a great example of self-care." " You did a great job of leading the group"and the staff person identified a previous time that I did not hear well enough to record. "Thank you for sharing your feelings."

2 Staff asks open-ended questions

Staff often ask open-ended questions. - "If you had five minutes, what would you do for self-care?" - How are you thinking or feeling?" - " What does that mean?" -"What happened to the balloon?" -" What did you learn from the experiment?" -" What are some of your goals and dreams?"

3 (Y) Staff actively involved

The staff actively participated with the youth in all program activities.

4 (S) Staff encourage creativity

The staff allowed and commented in a positive way when the youth modified the balloon chemical experiment to use the materials to make the balloon into a stress ball.

III. INTERACTION

Belonging

1 Opportunities for youth to get to know each other

The daily check-in activity is designed to help youth to get to know each other and for the staff to get an understanding of how the youth's day went and how they are currently feeling.

2 Inclusive relationships

The youth appear to know each other and there was no evidence of being exclusive.

3 Youth identify with program

The three youth participated in program activities but there was no evidence of program ownership from the youth observed.

4 (Y) Public acknowledgement of achievements

This was not observed.

Collaboration

1 (Y) Opportunities to work cooperatively

Did not observe any opportunities provided by staff for the youth to work cooperatively in a group.

2 (Y) Interdependent roles

Did not observe any opportunities provided by staff for the youth to work cooperatively in a group.

3 (Y) Shared goals

Did not observe opportunities provided by staff for youth to work towards shared goals.

Leadership

1 (Y) Practice group process skills

The youth had the opportunity to practice group process skills during each program session during the time the staff facilitated group discussions related to the activities. The youth were learning to listen without interrupting, share ideas, take turns, and contribute to a discussion.

2 (Y) Mentoring opportunities

No opportunities provided by staff for youth to mentor another youth were observed.

3 (Y) All youth lead group

No opportunities provided by staff for youth to lead a group were observed. +

Adult Partners

1 (Y) Staff shares control with youth

The staff shared control with the youth in each of the program sessions. The sharing of control is evidenced by choices youth can make and staff utilizing youth ideas.

2 (Y) Expectations explained

Staff provided explanations when asking staff to comply with an expectation. For example, a staff person asked a youth to remove his ear phones so that he could hear the instructions.

IV. ENGAGEMENT

Planning

1 (Y) Opportunities to make plans

This was not observed.

2 (Y) Multiple planning strategies used

This was not observed.

3 (S) Staff encourage program goal setting

This was not observed.

4 (S) Preliminary design opportunities

This was not observed.

Choice

1 (Y) Content alternatives

All youth could select the self-care activity they wanted to practice. All youth decided what they wanted to do during the Power Hour session. The choices included: homework assistance, Stride Academy, or STEM activity.

2 (Y) Process alternatives

The youth could decide how they wanted to do the self-care activity they chose to do.

Reflection

1 Intentional reflection

Staff asked all youth reflection questions in each session. - Does the self-care activity you chose help with your mood? - What did you learn from the experiment? - What did you learn about post-secondary educational opportunities?

2 Multiple reflection strategies

Verbal questioning was the only strategy used by staff that was observed.

3 Structured opportunities to provide feedback

Staff is receptive of feedback initiated by staff regarding whether they liked or did not like an activity but it was not observed that staff solicited the feedback.

4 (Y) Structured opportunities to present to the group

This was not observed.

Connections

1 (S) Staff connect activities with prior knowledge

At least a couple of times staff helped youth connect a current activity to personal experiences or previous knowledge. For example: When talking about self-care choices, a student mentioned a time when he had done one of the choices before and based on the staff person's response, I assume he had led the group in doing a self-care exercise in the past. The staff person said, " You did a great job of leading this in the past." A youth said in the future he wanted to be a statistician. The staff person helped him connect his interests and abilities to becoming a statistician. She asked the youth, "Do you like math?" What math classes are you currently in?" " She went on to give a couple examples of how

statisticians use math in their work.

2 (S) Staff connect activities to societal/ethical issues

This was not observed.

3 (S) Staff connect activities to career prep

Staff helped the youth make connection to the options the youth listed under each category i.e., Technical-Vocational, Military, 2yr/4yr colleges, and job corps to their interests and future careers they may want to pursue

4 (S) Staff connect STEM concepts

During the types of post-secondary education activity, the staff was observed once help a youth make a connection to a STEM discipline. A youth said in the future he wanted to be a statistician. The staff person helped him connect his interests and abilities to becoming a statistician. She asked the youth, "Do you like math?" What math classes are you currently in?" " She went on to give a couple examples of how statisticians use math in their work.

V. STEM Skill Building

Scientific Reasoning

1 (S) Staff support youth in identifying a guiding question

This was not observed.

2 (S) Staff support scientific method or STEM design process

This was not observed.

3 (S) Staff ask youth to make predictions, conjectures or hypothesis

Although the youth did the experiment of putting combining baking soda and vinegar, it was not observed that the staff asked the youth to make predictions , conjectures, or hypothesis about what would happen.

4 (S) Staff support youth in using a simulation, experiment or model

This was not observed.

5 (S) Staff support youth in analyzing data

This was not observed.

Observation and Measurement

1 (S) Staff support youth in collecting data/measurements

This was not observed.

2 (S) Staff support youth in recording data/observations

This was not observed.

3 (S) Staff support youth in using tools

This was not observed.

4 (S) Staff highlight value of precision and accuracy

A staff person called attention that the bubbling over of the vinegar and baking soda for one student was due to the amount of baking soda and vinegar he used. The staff person explained that to use the chemical reaction to blow up the balloon, the youth should use the measurements included in the instructions the staff member was reading.

Representation

1 (S) Staff model use of STEM vocabulary

A staff member modeled the use one STEM vocabulary word during the STEM experiment. The staff member provided a definition of a chemical reaction and told the youth that is what they would be observing when they mixed the baking soda and vinegar together.

2 (S) Staff encourage youth in use of STEM vocabulary

This was not observed.

3 (S) Staff support youth in using classification/abstraction

This was not observed.

4 (S) Staff support youth in conveying STEM concepts through symbols/models

This was not observed.

VI. STAFF INTERVIEW

Program Preparation

1 (S) Staff create lesson plans

The staff person interviewed said that a lesson plan was used for all STEM activities.

2 (S) Staff identifies instructional goals

The staff person interviewed said that there are specific instructional goals for each STEM activity.

3 (S) Staff links STEM to school-day content

The staff person interviewed said that all STEM activities were linked to the content of the school day.

4 (S) Staff have knowledge of youth accomplishments

The staff person interviewed said that the staff was aware of the academic achievements and challenges of all youth in the program.

5 (S) Safety polices related to STEM are enforced

The staff person interviewed said there were safety policies and procedures for STEM activities and that these policies were consistently followed.

6 (S) Staff expose youth to people/places using STEM

Youth are exposed to people or places using STEM by videos and the internet. There are future plans to bring in guest speakers/plan field trips.

Project-Based

1 (S) STEM activity is connected to multi-session project

The staff person interviewed said that none of the STEM activities were a part of a multi-session series or project.

2 (S) Youth participate in multi-session project

The staff person interviewed said that none of the STEM activities were a part of a multi-session series or project.