2020 Virtual After-School STEM Club Feedback
Major Themes:
- STEM interest
- Perceptions of STEM Club
- Gender Perceptions
- Social Connectedness
- Resilience

Question Type: Qualitative and quantitative
Number of Questions: 24
Evaluation Type: Post Survey

The Sample Size
45 usable responses

Girl’s at a Glance

Racial Identity

- Multiracial
- Native Hawaiian/Other Pacific Islander
- Asian
- Indian
- Hispanic/Latina
- Caucasian/White
- Black or African American

Age

- 12 years old
- 10 years old
- 9 years old
- 8 years old
- 7 years old
- 6 years old
- 5 years old

100% Of girls have a parent who graduated high school.

89% Of girls have a parent who graduated from college.

Project Scientist attracted families from a variety of educational and racial backgrounds. There is a slight difference between the demographics of the girls and parents who completed the STEM Club surveys.
Project Scientist Engagement

100% Of girls would go to STEM Club again if they were given the chance.

What the girls are saying

• My favorite part of STEM Club was meeting new people that made me think a different way.
• Building the catapults was my favorite.
• My favorite Part of STEM Club is when we get to make the different experiments at the end.
• My favorite part of STEM club was Ready to Launch. I liked when we made catapults.
• My favorite part was the balloon experiment. The balloon popped on me and the salt got all over me. It was fun to try many times.
• I liked when we did the dancing and yoga.
• The STEM box I got in the mail was my favourite.

Project Scientist provided different ways for girls to engage with STEM Club including arts, physical activities and hands on STEM experiments. The online environment facilitated by Project Scientist, coupled with the dynamic at-home activities, resulted in 100% of girls reporting they would participate in STEM Club again if given the chance.

Social Connectedness

78% Of girls are only participating in STEM Club for their STEM education.
100% Of girls felt like they were part of a community in STEM Club.

Project Scientist provided a much needed space for girls to connect in community. For most girls, STEM Club was their only STEM extra curricular. While 73% of girls reported they do not like going to school right now, 100% reported they would continue to do STEM Club if given the chance.

STEM Interest

94% Of girls are believe they can pursue a STEM career.
100% Of girls want to learn more about STEM.
83% Of girls complete hands on activities outside of STEM Club.
96% Of girls said some of the STEM activities were challenging.

What the girls are saying

• STEM is an interesting way to learn about virtually everything that is around us, that we see, we can touch, even taste.
• STEM is something that you do to learn how to make things. I like to do my science with STEM.
• A fun learning experience for any age. We all like doing experiments in science class and it is that!
• It is really fun to be in you get to make really cool things and learn at the same time!

Project Scientist created a space to foster interest in STEM well beyond STEM Club.
Perceptions of Gender

89% Of girls identified a career in STEM when asked what they want to be when they grow up.

78% Of girls identified a woman when asked who their role model is.

Girls are often discouraged from pursuing STEM and are not always introduced to women to look up to. Of the girls who participated in STEM Club, most identified a career in STEM when asked what they want to be when they grow up, and identified a woman when asked who their role model is.

Resilience

72% Of girls would not change the way they do things to please someone else.

94% Of girls are not afraid to share their opinion, even if others might disagree with them.

100% Of girls believe it is okay to make mistakes.

78% Of girls believe that when they make a mistake, they are able to easily move past it.

Resilience is a key skill needed to succeed in learning new things, STEM included. Girls who participated in STEM Club were able to reframe mistakes as positive opportunities, and show signs of standing up for what they believe in despite external pressures.
Project Scientist attracted families with a variety of educational and racial backgrounds. 67% of survey respondents were scholarship families and 21% recently immigrated to the United States.

### Continuation of Learning

- **52%** Of parents have been having difficulty keeping their daughter engaged in online learning.
- **75%** Of parents had enrolled their daughters in a STEM extracurricular previously.
- **60%** Of parents are worried their daughter will face learning loss due to school closures. *

*When we asked parents in Summer 2020, 75% of parents reported being worried their child will face learning loss due to school closures. Despite the duration of closures, this fear remains among parents we surveyed in STEM Club.*

For most parents, STEM Club was the only extracurricular their daughter was enrolled in. Despite the duration of the lockdown, parents remain worried that their daughter will face learning loss.
Project Scientist Engagement

90%  Of parents felt supported by Project Scientist to help their daughter participate in STEM Club at home.
91%  Of parents believe Project Scientist created a diverse environment for their daughters to learn.
91%  Of parents believe STEM Club taught their daughter more about STEM.
86%  Of parents would recommend STEM Club to other parents.
89%  Of parents would enrol their daughter in STEM Club again if given the chance.
88%  Of parents found it easy to get their daughter to participate in STEM Club activities.
86%  Of parents said their daughter mentioned STEM Club topics at home.

Parents found STEM Club to be an engaging and diverse activity to enrol their daughter in, and would recommend it to other parents.

What the parents are saying

- I can trust the time she spends at STEM Club will be enriching and interesting. She will be engaged and learning while also feeling like a part of the group. After each session she always has something interesting to talk about!
- STEM Club is an amazing opportunity to engage with other like-minded girls and learn about STEM concepts through hands-on fun and age appropriate discussions led by women at various stages of pursuing careers in STEM fields.
- STEM Club is an opportunity to explore the world of science with hands on experiences that awaken their curiosity and expand their critical thinking skills.
- A great STEM club that has really stepped up to keep my daughter engaged and encouraged.
- It’s a fun extension that we look forward to every week that also keeps my daughter’s imagination and interest in STEM going.
- An amazing opportunity to engage your daughters in science with like minded girls and women role models. The professional women keep it real and show that it is possible to be a scientist and a mother at the same time. It has been a blessing in our family because my daughter is being exposed to things I was never exposed to and could not begin to trigger that curiosity of questioning and learning. It is a well organized program of women, and for the women.
- STEM Club is amazing! It’s a place where girls with common interests meet and explore a world of science with women scientists that encourage little and young girls to achieve goals beyond their wildest dreams!!! The best experience and activity my daughters have. My daughters love it and looking forward to it every week!
- It was amazing what was achieved with such limiting circumstance. I look forward to what it would be like in person.
- A great opportunity to expand STEM for girls outside of school. I love the multi-week focus on one topic. Our daughter loves talking about the topic and learning session throughout the week. The interaction with other girls interested in science is also so very important.
- I was surprised at how engaging it actually is for kids. That is the struggle we’ve had with online homeschool, it’s hard to keep the children’s focus and my daughter gets distracted by other things around her. With project scientist, she is engaged the entire time and interacts with the activities. Afterward, she is able to summarize everything she has learned.
- STEM Club is a great way for my girls to get hand-ons education and learn from another qualified teacher.
Additional Feedback

We believe you know your participants and program best. We make recommendations and observations based solely on your survey results, so sometimes we cannot see the entire picture. Because of this, we have provided any constructive feedback that was submitted in a separate document.

“Timing

• We love the teachers and the subjects. We are scheduled to go back to school in person after the first of the year and will not be able to participate in the STEM Club since the school day end time and the start of STEM are too close together to accommodate pick up line and traffic time. A 30 minute later start time would make it so we could participate again! It would also be cool if there was a once a month Saturday morning experiment or larger project activity. Something from 9 am to noon to help introduce more engineering or mechanics into her experiences. Each session could be a stand alone payment for the activity or there could be a punch card payment for three activities and then the schedule for the first six months so parents could plan the Saturdays that the kiddo was interested in and made sense with schedules. Maybe this is something that the STEM Superstars could lead or help develop the activity with their employers support (and donations...?)

• We are going to participate in the 2021 STEM Club sessions and I think the time shift will be very helpful. My daughter only had about 30 minutes in between the end of her school day and the start of STEM Club this fall; she always looked forward to it but it will give her more time to get a snack, step away from the screen for a little bit, and recharge.

• Do it more than once a week. My daughter loves and looks forward to the activities and would benefit from further reinforcement throughout the week.

• The hands on nature of the program has really engaged her. The Saturday sessions have been a little slower and were more difficult to keep her attention.

Class size

• My daughter loved her sessions, and as a parent I appreciate that I didn’t have to be with her for her to be successful in them. She is 6. Sometimes the shares ran a little long due to large class sizes. I’d love to see more time spent actually engaging in science and not every student having to always share back especially when so many girls took a long time to contribute even a sentence or two.

• Maybe lesser girls in class.

Content/Delivery

• It would be really great if Project Scientist also included lectures or discussions from actual female scientists themselves, i.e. Q&A discussion with a NASA scientist and a space craft/activity to accompany the Q&A discussion. The Project Scientist lecturers or classroom teachers need to focus on how to engage children virtually within the classroom. Our teacher in the beginning suffered from interacting appropriately with the children (she only called on certain girls), and my daughters were generally bored and didn’t feel included.

• It could be better science than yoga or other activities like that.

• It would help greatly if the team was trained beyond the basic hosting features of distance learning platforms and used the full array of tool available on the platforms. It would really help it from seeming like another zoom call. Use high resolution cameras (1080p 60fps) to host sessions.

• If possible raise the age limit. Families I have mentioned the program to inform their girls are over the age by a year or two.

Spreading the word

• I truly think your program is doing a great job! I have tried to pass information on to other girls in our community. Thank you!

• Most parents I speak to have never heard of the program. The only way I heard about it was an article in the new papers a couple years back. I would recommend reaching out to the schools or girl scout programs to get more participants.

• Keep on doing what you are doing. How can I personally give of my time to help keep this program improve, keep on going, steal the world?