VIRTUAL LAB PARENT REPORT

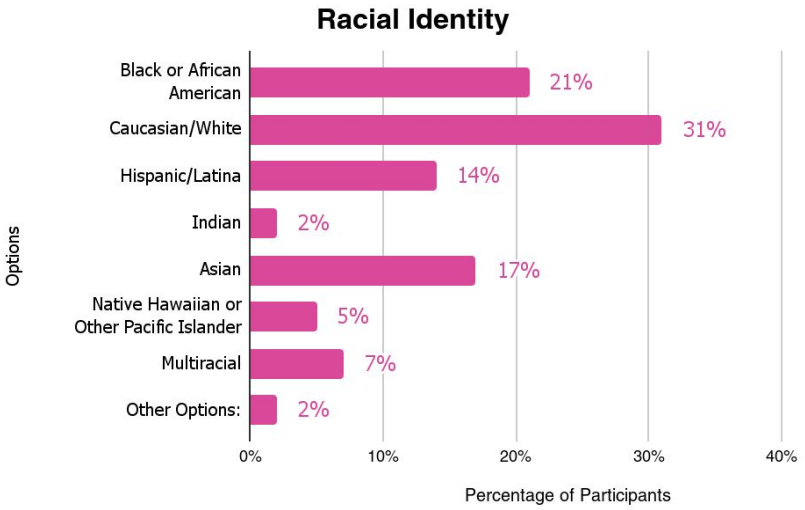
Surveys and Report by Lunaria Solutions

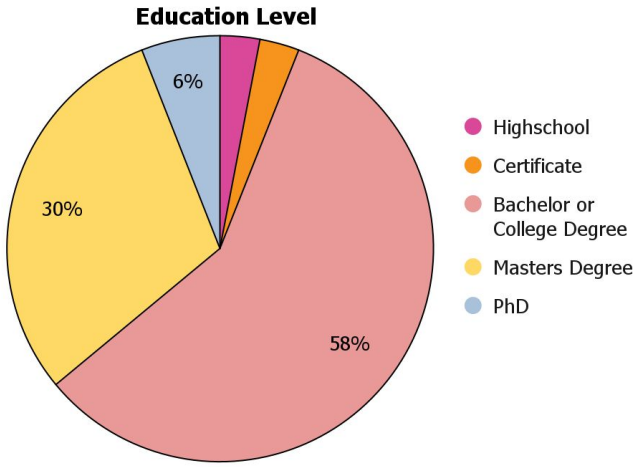
Major Themes:
Perceptions of Project Scientist
Daughters' STEM interest
Parent's Learning Preference
Project Scientist Engagement

Question Type: Qualitative and quantitative
Number of Questions: 35
Evaluation Type: Post Survey

The Sample Size
36 usable responses
81% Financial Assistance
19% Paid

The Families at a Glance

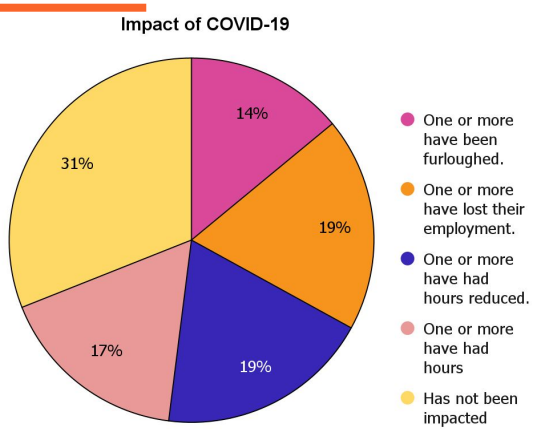


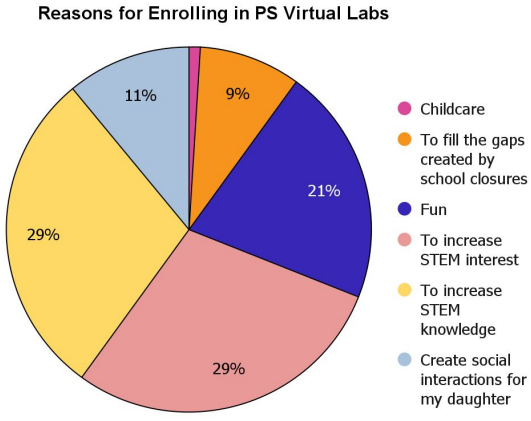


Project Scientist attracted families with a variety of educational and racial backgrounds. 61% had never participated in Project Scientist before, and 81% of survey respondents were helped by financial assistance. Most families, 38%, have been in the United States for over 4 generations.

Most families came from the East of the West (50% and 44%) and only 6% from the MidWest.
How could you encourage more families from the MidWest to enroll their daughters in programs by Project Scientist?

COVID-19 Impacts



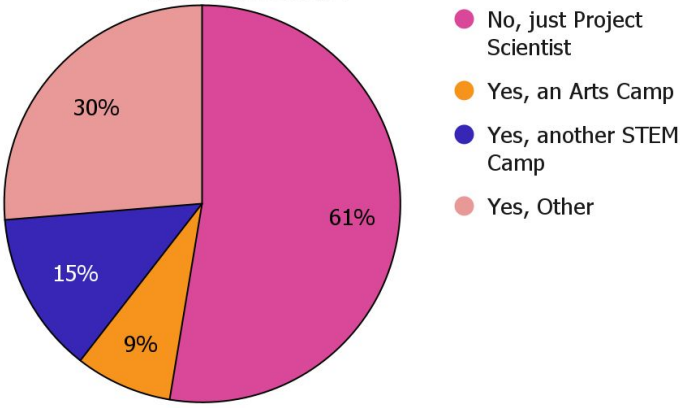


Almost 70% of parents (or other primary caregivers) have faced changes to their work hours as a result of COVID-19.

We asked parents what their top 3 motivations were for registering their daughter(s) in Project Scientist Virtual Labs. Most parents reported that it was to increase STEM interest (29%) and STEM knowledge (29%), these number are down from last year at 39% and 46% respectively. However, those that selected "fun" (21%) and "create social interactions" (11%) increased from 11% and 4%. This year 9% also stated that they registered their daughter(s) to fill the gaps created by school closures, and 1% selected that it was also for childcare, neither of which were selected last year. Although numbers are down regarding STEM specific reasons for enrollment, overall reasons are up.

Perceptions of Project Scientist | 3.72 score out of 4

Did you enroll your daughter in any other extracurricular?



95% Of parents believe the content delivered through Project Scientist Virtual Lab matched their expectations.

100% Of parents would enrol their daughter in a Project Scientist program again.

100% Of parents think that Project Scientist provided a diverse environment for their daughter to learn.

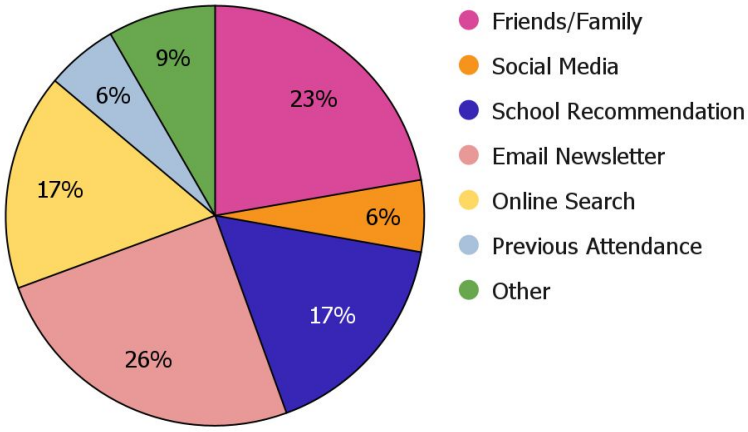
For most parents, Project Scientist was the only extracurricular they enrolled their daughter in, financial constraints being cited as the main reason why. For those that did enroll their daughter(s) in other activities, most referenced other STEM programs (e.g., California Science Centre, Dragon Coding, USC virtual STEM camp), art programs, and programs like the Khan Academy, Outschool, and Bumobrain.

When asked what made them choose Project Scientist most cited an interest to enhance their daughters learning about STEM programs or to enhance the curiosity they already have.

What the parents are saying

- My daughter **needs a safe space where she can learn science without being criticized** … There's a lot of **negativity surrounding being outspoken and educated** … My husband and I have had to diligently set boundaries with individuals who are not supportive of our daughter's goals.
- I saw the ad and information on Facebook. The programs looked interesting and like something she would consider more "fun" than virtual school this past year. I was very happy that **financial aid was an option** which meant she could attend more than one session!
- **We like the all-girl aspect and training that comes with PS**, because so many camps, programs and schools do not monitor student interactions or train their instructors to balance instruction … PS really impressed me with the instructors and order so that all students were rewarded with even participation and encouragement.
- Our daughter has been attending Project Scientist for years and we just love it. I could not imagine choosing another camp for her.
- It gives my daughter something c**onstructive and entertaining** to do, while **stimulating her brain** and **not feeling so alone** during the Summer, which keeps her safe from being exposed during this pandemic.

How did you hear about Project Scientist?



Many parents were given personal recommendations when asked how their heard about Project Scientist. These came through their daughters' school, a friend or family member, their job, and other girl groups (Girl Scouts).

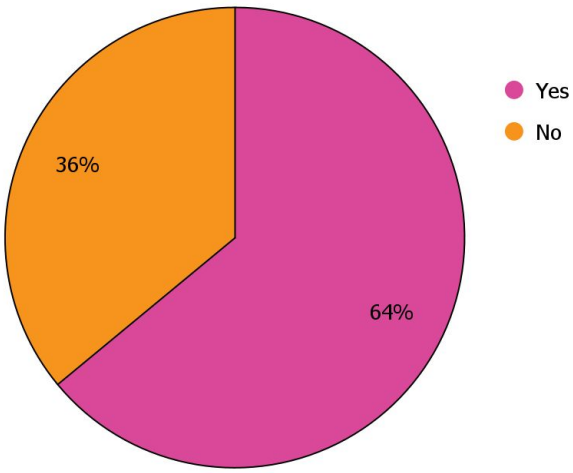
100% Of parents would recommend Project Scientist to other parents.

Daughter's STEM Interest | 3.6 score out of 4

97% Of parents agree that their daughter(s) enjoys school.

100% Of parents agree that it was easy to get their daughter(s) to sign onto Project Scientist Virtual Labs.

Has your daughter previously attended a STEM extracurricular previously



97% Of parents agree that their daughter(s) mentioned Project Scientist STEM topics at home.

94% Of parents agree that it was easy to get my daughter to participate in Project Scientist Virtual Lab activities.

97% Of parents say that their daughter looked forward to Project Scientist Virtual Labs every day.

100% Of parents think Project Scientist taught their daughter more about STEM.

64% Of parents have enrolled their daughter in a STEM club before.

We asked parents how they would describe Project Scientist to other parents. Most responded that it is a high quality program that gives young girls an opportunity to perform hands-on experiments and meet, not only other young girls who are also interested in STEM, but also "STEM Superstars" that teach them about a variety of topics.

What the parents are saying

- Project Scientist is a **great opportunity to expose your daughter to a group of like-minded girls** in their pursuit of STEM knowledge. The activities vary from week to week so the students learn a variety of concepts, meet amazing women who work in STEM fields, and build friendships throughout the weeks.
- Oh and do I ever! I enthusiastically explain what an amazing program it is for **quality, hands-on STEM lessons lead by fantastic staff members**. It's very obvious the quality Program Scientist provides in terms of camaraderie with girls across the country/nations, exposure to STEM careers and women (whom they can see their likeness in) and the enthusiasm for what girls can strive for. I love it!!
- Fantastic quality programming. **My daughter was engaged, learning, building relationships and having fun!** Far exceeded my expectations - especially for how challenging virtual offerings can be.
- Project Scientist truly focuses on **helping the girls grow into whatever they want to be** and Project Scientist supports them on that journey.
- I would tell other parents this **program was positive**, but I would perhaps not recommend it for a child as young as 4-5 … I think she was not ready for the experience, and it would be better for her when she was a bit older, and presented in person. This was my daughter's first intensive online learning experience, and it was very challenging for her to stay focused.
- Outstanding program providing valuable opportunities in the world of STEM. GREAT **HANDS-ON experiments and invaluable connections** to women in STEM.
- I would say that Project Scientist is a **great tool to have your child gain STEM awareness/knowledge**, through hand on my participation and experiments.
- **Extremely interactive** and kept my daughter's interest the whole time. They were able to explain complex STEM lessons in a way that a young child can understand so well that my daughter can actually retain the knowledge and later share it with myself or other adults

Parent's Learning Preference | 2.62 score out of 4

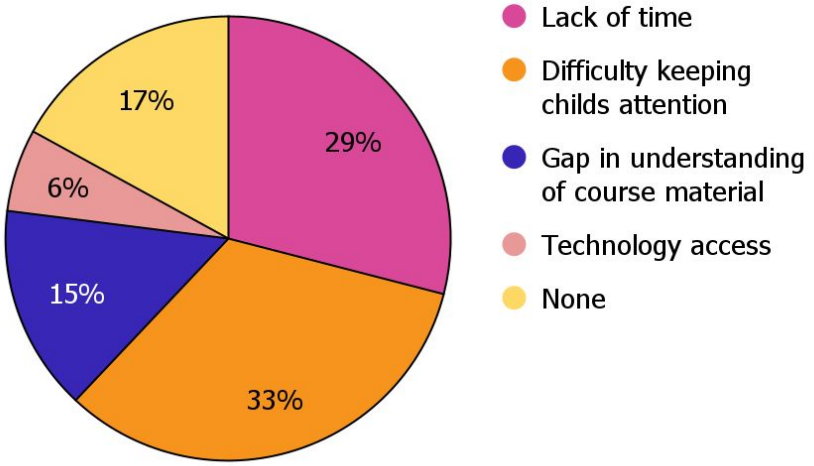
72% Of parents think that online learning is a better fit for their current family lifestyle.

77% Of parents agreed online learning allowed for more quality time with their daughter(s).

67% Of parents agreed that online learning allows their daughter(s) to access programs they would not have access to otherwise (i.e., you live in rural areas where you cannot easily access programs, lack of time, etc.).

72% Of parents agreed that online learning has allowed their daughter to participate in multiple programs.

Check the options that describe barriers you've face educating your child online.



33% Of parents felt they had a difficult time keeping their daughter(s)' attention.

29% Of parents cited a lack of time.

15% Of parents responded that it was a gap in their own knowledge.

6% Of parents said it was because of a lack of technology access.

83% Of parents like online learning because they are able to better support their daughter's learning.

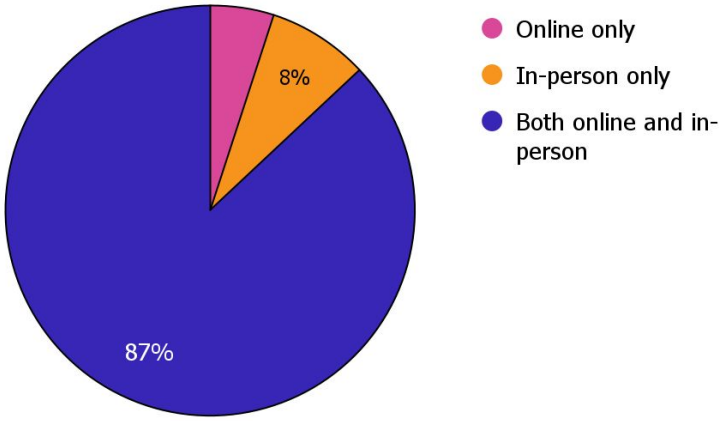
53% Of parents like in-person learning as it meets their daughter's learnings needs, more so than online learning.

92% Of parents like in-person learning because it helps with their daughter's social development and interactions with other kids.

When asked if parents preferred online or in-person learning for their daughter, only 53% said that they think in-person learning meets their daughter(s)' needs, whereas 83% feel that online learning is better fit.

92% of parents reported that they feel that in-person learning is crucial to their daughter(s)' social development needs.

After COVID-19, what type of programs will you consider for your daughter?



Most parents (87%) report that they will continue to use online learning programs in addition to in-person learning programs after the effects of COVID-19 has lessened.

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Project Scientist Engagement | 3.25 score out of 4

92% Of parents said that if given the chance, they would want to be involved in improving and growing Project Scientist Virtual Lab.

Parents were asked to help improve Project Scientist and to inspire more girls to pursue STEM. Most parents reiterated how much they appreciated and enjoyed participating in Project Scientist and how much their daughter(s) enjoyed the activities. A few parents asked for the continuation of virtual programs so that their daughters could continue to learn citing health and access as the main concerns.

Other parents commented on how there could be a bit more structure involved, in particular, further instruction on how to be respectful when asking questions and not interrupting the STEM Superstars or talking over the other girls.

The following quotes are some of their comments and recommendations.

What the parents are saying

- **Continue this fantastic program virtually** after COVID-19 … Also, consider starting more in-person sites around the country if there is interest/amenities (i.e. Universities, STEM businesses) in the community to support an in-person STEM camp.
- Your program is excellent, but a suggestion for on-line learning as we open up our communities would be to offer **some means for in-person once per week for the girls**. I think the in-person mixed with on-line can be powerful.
- Please continue doing the scholars program so that way my daughter can continue on with Project Scientist after she is 12 years old. She loves Project Scientist so much and would be lost without it.
- **The price for the after-school club is going up quite a bit** in the fall … We hope that you will consider summer programming opportunities for families who don't live in one of your cities.
- 1. The STEM superstars (and virtual tours) are so fantastic that I would suggest making sure not to accidentally cut them off if they need a few extra minutes for their presentation and/or to answer questions. 2. I'd "coach" (guide/train) the girls a bit on the first day about being attentive, respectful listeners and not interrupting the STEM superstar while the person is speaking … 3. During the hands-on portion, I'd try to make sure that the girls **understand the purpose of what they are doing** (from the beginning), rather than to have them start building something without initially knowing its purpose. After they finish, I'd ask them to explain to one another what they just did and why (to make sure that they understood it).
- **In person learning will make a stronger impact in the long run** … The length of the classes was really a struggle for my very bright 5 year old, by the end of 3 hours she was zapped of energy, antsy, and could not focus on the project … I would highly recommend more scaffolding for each project that will offer more context and **explanation as to why the children are doing each step** …
- The summer program was amazing. I would however **liked to have written instructions for the various experiments**. I thought last year there was a group PS partnered with who provided the kids with a box and a booklet with references to online instructions. Really needed that especially with a 4 year old - we felt behind even though the teachers were AMAZING! …
- I like the high energy of the leaders and the intentional ways they work to get everyone involved each day. In a few instances, my student was **reluctant to talk and sometimes became slightly less engaged when students spoke over other students and the teachers**.
- While we look forward to returning to in-person events and activities **the ability of Project Scientist to offer virtual programming has been wonderful because my daughter is in a high-risk category** … If you could continue to offer the virtual option, so many more families would be able to participate and children would benefit from the programming and social interaction, especially if they are unable to attend school.
- Teachers need to be trained better to **manage online classes**. A couple of students were quite disruptive and teachers did very little to manage interruptions and out of turn comments/answers. The kits were good and delivered on time , however sometimes the things the teachers built also did not work and the student did not feel very motivated. Teachers need to be well versed in building these STEM projects so that they can guide the students properly. This was my first Project Scientist camp and I paid the full amount for it. I had high expectations but was a bit disappointed.