

Seeds to STEM Parent Survey Findings

Report Purpose

To address **Family Outcomes** related to **Aim 2** of the *Seeds to STEM* (S2S) program, a Family Survey was distributed to Los Angeles and Philadelphia families of children in Cohort 1 (S2S Intervention) and Cohort 2 (Comparison) at the beginning and end of the academic year. While families were also asked to complete the survey at the beginning of the academic year (Fall 2022), too few participated at that time to include those data in this report. As such, this report provides findings related to Family Outcomes based on the Spring 2023 Family Survey.

Instrumentation and Sample

The Family Survey has three sections: 1) General Kindergarten Readiness [4 items], 2) Specific Kindergarten Readiness Skills [16 items], and 3) Community Nutrition and Health Resources [7 items]. Survey sections related to kindergarten readiness (1 and 2) are rated on a 4-point Importance scale (“Not Important, Slightly Important, Important, Very Important”). Section 3 about resources is rated on a 4-point scale: “Do not know where to go and do not want more information; Do now know where to go and would like more information; Know where to go but have not visited; Know where to go and have visited.”

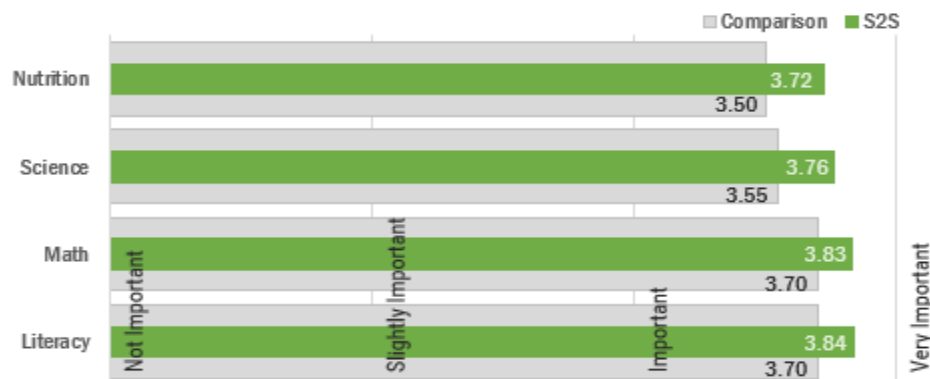
A total of 169 adult family members completed the survey in Spring 2023 (S2S = 144; Comparison = 25). Most survey participants self-identified as Female (62%). Survey participant race/ethnicity reflected a diverse sample consisting of most participants self-identifying as Black or African American (66%) followed by Hispanic, Latinx, or Spanish Origin (25%). Nearly two-thirds of survey participants indicated their location was Philadelphia (64%).

Findings

General Kindergarten Readiness

Family members were asked to rate the importance of having their child learn about four topics (Literacy, Math, Science, and Nutrition) to be ready for kindergarten. **Figure 1** presents average ratings by cohort. Regardless of cohort, family member responses averaged between “Important” and “Very Important” across content areas, with Math and Literacy being slightly higher than Science and Nutrition. However, family members in the S2S cohort reported slightly higher levels of importance in all areas. The S2S cohort average importance ratings for Nutrition were statistically significantly higher than the comparison group at the $p < .05$ level when evaluating for differences with a one-tailed independent samples t -test. All other differences were not statistically significant.

Figure 1. Importance of Kindergarten Readiness by Content Area and Cohort



Specific Kindergarten Readiness Skills

Importance ratings were provided by family survey respondents on four specific items within each content area: Literacy, Math, Science, and Nutrition. **Figures 2-5** graphically display the results. Similar results were found across content areas. Overall, family members (regardless of cohort) reported high importance levels across items in each content area – averaging between “Important” and “Very Important”. While *S2S* cohort families reported slightly higher importance ratings across 88% of items, there were no statistically significant differences identified from independent samples *t*-tests.

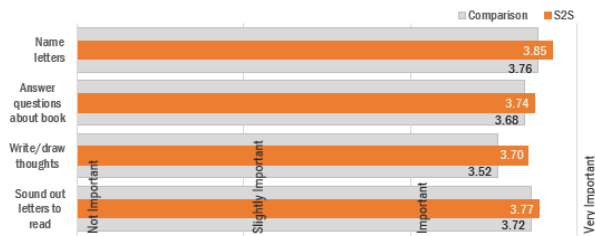


Figure 2. Literacy Kindergarten Readiness Skills

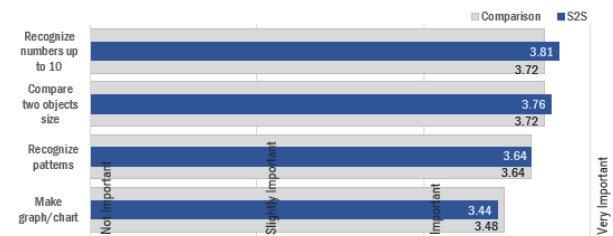


Figure 3. Math Kindergarten Readiness Skills

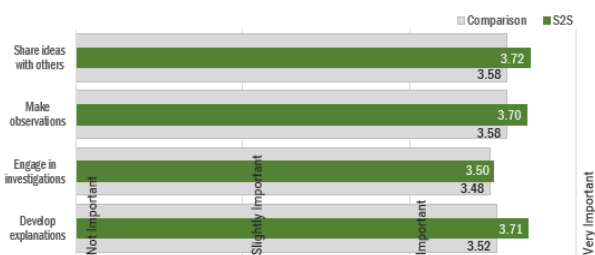


Figure 4. Science Kindergarten Readiness Skills

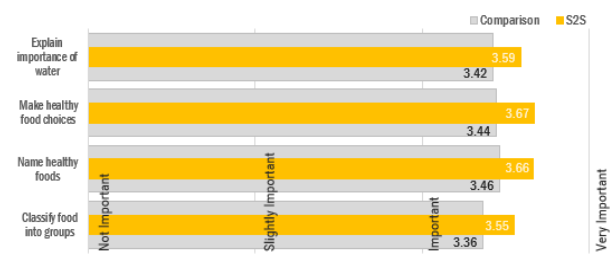


Figure 5. Nutrition Kindergarten Readiness Skills

Community Nutrition and Health Resources

Family members responding to the survey indicated their knowledge and desired information level in relation to the local community resources for nutrition and health (see Table 1). Highlighted cells represent a 10%-point difference between *S2S* and Comparison family responses. *S2S* families reported higher levels of knowledge about resources than Comparison families on all items except for one (*where to buy fresh fruits and vegetables*). Numbers in blue indicate a majority (50% or higher) response by survey participants. Across groups, fewer families indicated knowing a place in their neighborhood where people are *gardening/growing food* compared to other community nutrition and health resources.

Table 1. Knowledge and Information Desired for Community Nutrition and Health Resources

Item	Do not know where to go and do not want more information		Do not know where to go and would like more information		Know where to go but have not visited		Know where to go and have visited	
	S2S	Comp	S2S	Comp	S2S	Comp	S2S	Comp
1. I know a place in my neighborhood to buy fresh fruits and vegetables.	0%	0%	29%	5%	15%	24%	56%	71%
2. I know a safe place (in my neighborhood) to play and/or be physically active.	0%	0%	5%	5%	6%	24%	90%	71%

Item	Do not know where to go and do not want more information		Do not know where to go and would like more information		Know where to go but have not visited		Know where to go and have visited	
	S2S	Comp	S2S	Comp	S2S	Comp	S2S	Comp
3. I/my child have a doctor, other than at the emergency room, who knows our medical history.	0%	0%	1%	0%	4%	19%	96%	81%
4. I know a place to get food if I can't afford it for the month.	1%	10%	17%	20%	37%	30%	45%	40%
5. I feel confident cooking myself/my family a healthy meal.	0%	0%	2%	0%	5%	20%	92%	80%
6. I know a place in my neighborhood where people are gardening/growing food.	6%	10%	24%	14%	32%	43%	38%	33%
7. I know about programs my child/family can attend to learn about healthy choices.	1%	10%	15%	19%	7%	24%	77%	48%

Summary of Findings and Limitations

On the whole, regardless of group, families reported high levels of perceived kindergarten importance and knowledge of nutrition and health community resources. S2S families reported slightly higher levels of importance when it comes to their child's kindergarten readiness and knowledge related to health and nutrition resources in their community than Comparison families. Findings are not statistically significant across most items, which may in part be due to low sample sizes in the Comparison group. Collecting surveys from families is proving to be challenging, hence the reason pre to post growth among groups was not possible to evaluate. As such, findings from this report may not be used as an indicator that the *Seeds to STEM* program is causing these slight differences. Rather, results from the Parent Survey Report can be used to support programmatic adjustments that may help improve areas of indicated need, such as providing additional information to families about community gardening initiatives in their local areas.