

## **Appendix 2: Item-by-Item Justification of Parent Survey Items**

Item #	Question	Research Question <sup>1</sup>	Source	Answer Options	Purpose of Item <sup>2</sup>	Justification Notes
1	Child's first name and last name	N/A	SoI parent survey 2011	First name Last name	A	Information is used to confirm match in dataset.
2	What is your child's birthday?	N/A	SoI parent survey 2011	Month Day Year	A	Information is used to generate a unique identifier in dataset for matching purposes.
3	What grade level will your child enter in fall 2013?	4	SoI parent survey 2011	4 <sup>th</sup> 5 <sup>th</sup> 6 <sup>th</sup> 7 <sup>th</sup> 8 <sup>th</sup> 9 <sup>th</sup> Other	A, D	Information is used to confirm match in dataset, to establish youth eligibility for sample, provide capability to disaggregate findings by grade level, and to conduct non-response bias analysis.
4	What is your child's gender?	4	SoI parent survey 2011	Male Female	D, C	Information is used to disaggregate findings by gender and to conduct non-response bias analysis. Gender is also used to identify underrepresented students in STEM (i.e., female).
5	Is your child Hispanic or Latino/Latina?	4	Adapted from Department of Education HSLS of 2009 Baseline Student survey	Yes No	D, C	Information is used to disaggregate findings by ethnicity and to conduct non-response bias analysis. Ethnicity is also used to identify underrepresented students in STEM (i.e., Hispanic).
6	What is your child's race? Check all that apply.	4	Adapted from Department of Education HSLS of 2009 Baseline Student survey	White Black or African American Asian American Indian or Alaska Native Native Hawaiian or other Pacific Islander	D, C	Information is used to disaggregate findings by race and to conduct non-response bias analysis. Race is also used to identify underrepresented students in STEM (i.e., non-white and non-Asian students).
7	What is the highest level of education you have completed?	4	Department of Education HSLS of 2009, Baseline Parent Survey	Less than high school High school diploma or GED Associate's degree Bachelor's degree Master's degree Ph.D., M.D., law degree, or other high level professional degree	D, C	Parent's level of education will be treated as a control variable since it is considered an influential factor on student participation in academically focused activities. It will also be treated as a descriptive variable.

8	Do you have a degree in a science, technology, engineering, or mathematics field?	4	Adapted from SoI Parent Survey 2011	Yes No I don't know	C	Parent's degree in STEM will be treated as a control variable, since parent involvement in STEM is considered an influential factor on the youth's interest and participation in STEM.
9	Do you work in a science-related occupation?	4	SoI Parent Survey 2011	Yes No I don't know	C	Parent's choice of a STEM occupation will be treated as a control variable since parent involvement in STEM is considered an influential factor on the youth's own interest and participation in STEM.
10	During the last 12 months, has your child participated in any of the following activities outside of school? Check all that apply.	4	Department of Education HSLS of 2009, Baseline Parent Survey	Music, dance, art, or theater Organized sports supervised by an adult Religious youth group or religious instruction Scouting or another group or club activity Academic instruction outside of school such as from a Saturday Academy, learning center, personal tutor or summer school program A math or science camp Another camp None of these	D	This question is intended to identify parent motivation for enrollment by differentiating between parents who are motivated to enroll their children in diverse activities from those who are interested in sending their children to science camps or specifically to SoI.
11	Why is your child attending Summer of Innovation? Check all that apply.	4	Adapted from AWE Pre-Activity Survey for Caregivers	To have fun To learn more about NASA and space To have something to do To learn more about different majors in college (e.g., engineering, science) To learn about what scientists and engineers do To meet others with interests similar to my child Help my child to do well in school None of these	D	This question is intended to identify parent's specific motivation for SoI enrollment while considering the response to the previous question.
12	How or from whom did you hear about Summer of Innovation? Check all that apply.	N/A	AWE Pre-Activity Survey for Caregivers	A teacher A friend or family member Newspaper or other advertisement Web/Internet search, Received something in the mail School or community center Other	D	Information used to provide feedback to Awardees on their recruitment strategies

13	We also ask that you provide contact information.	N/A	SoI parent survey 2011	Your first name Your last name Telephone number Alternative telephone number Best time to call Permanent email address (optional) Alternative email address (optional) Student mailing street address City State Zip code Emergency contact first name Emergency contact last name Relationship to student Telephone number Alternative telephone number Best time to call	A	Contact information for follow-up survey. Zip code also acts as proxy indicator for socio-economic status through access to Census median household income data for zip code tabulation area.
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**<sup>1</sup>Research Questions Answered by Parent Survey**

4: What are the characteristics of SoI camps and their participants?

**<sup>2</sup>Purpose of Item**

A: indicates that the variable from this item will be used for administrative purposes (e.g., documentation of consent or non-consent, longitudinal tracking, pre and post survey data linking)

D: indicates that the variable from this item will be used in descriptive analysis

C: indicates that the variable from this item will be used as a control variable