# Key Findings from Evaluation of the 2019 GLOBE SRS

Presented at the GLOBE Watercooler Meeting
August 21, 2020



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### Agenda









Data collected and analyzed for evaluation

What we learned from the data

How the findings relate to your experiences

Questions and discussion



# Evaluation Data

#### Program data

 When, where, how many people and projects

### Participant registration

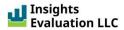
 Teacher and student demographics, school characteristics

#### Student surveys

 Before and after the SRS (pre and post surveys)

#### Teacher survey

 After the SRS (post only survey)



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# Evaluation Questions

Who participates in the SRS?

Does participation in the SRS affect students' science interest and self-efficacy?

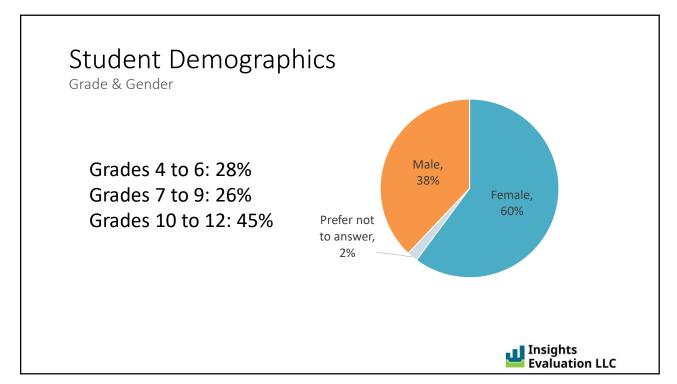
What do students like most and like least about the SRS?

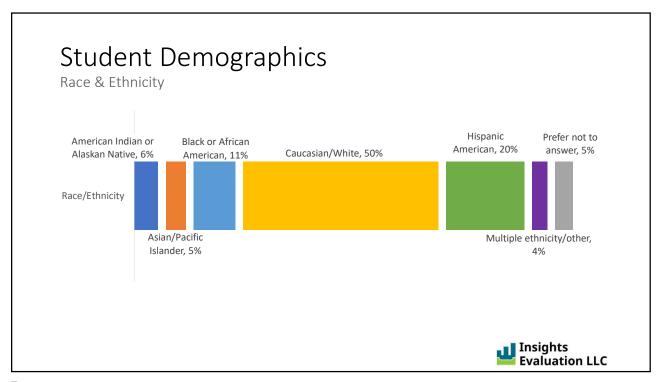
How satisfied are teachers with the SRS?

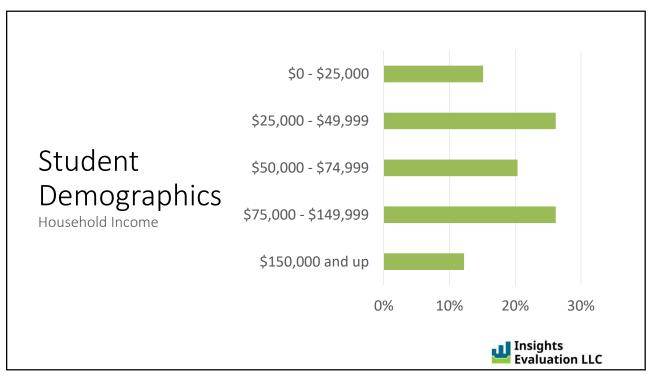
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Participation in the SRS
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Region & Dates	Location	Students	Teachers	Partnerships	Projects		
Midwest April 5-6	University of Northern Iowa, Cedar Falls, IA	36	5	2	20		
Northeast/Mid-Atlantic May 31-June 1	Boston University, Boston, MA	79	20	5	38		
Northwest May 2-4	Seattle, WA	10	5	4	3		
Pacific April 26-27	NatureBridge of Golden Gate, Sausalito, CA	71	13	2	26		
Southeast May 10-11	Atlanta, GA	26	9	4	11		
Southwest May 17-19	Mescalero, NM	39	14	4	16		
	TOTAL	261	66	21	114		
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# Teacher and School Demographics

- Teachers were majority female (72%)
- Teachers were majority white (82%)
- Teachers' schools were urban (45%), rural (34%), and suburban (17%)
- 66% of teachers were at schools where at least half the students qualify for free or reduced-price lunch
- 26% of teachers were at schools where at least half the students are English language learners

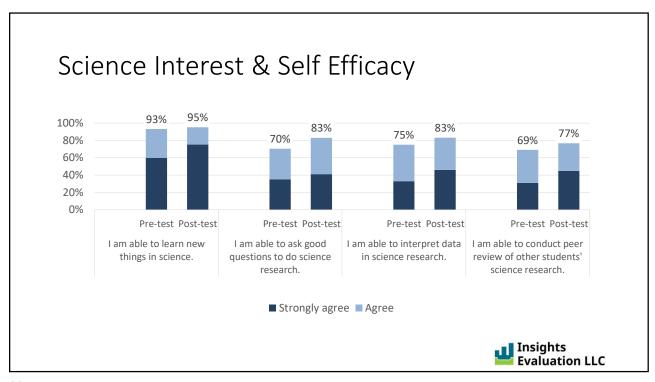


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### Student Survey Results





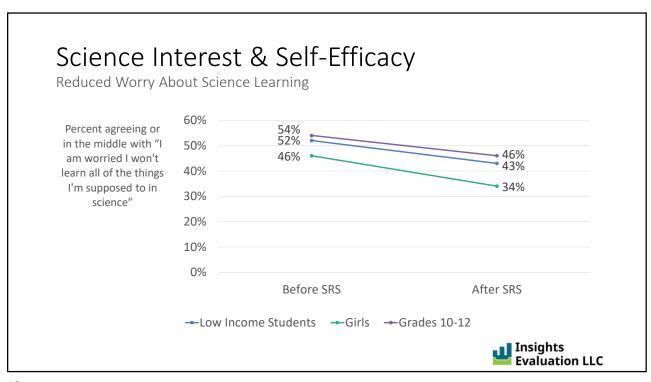


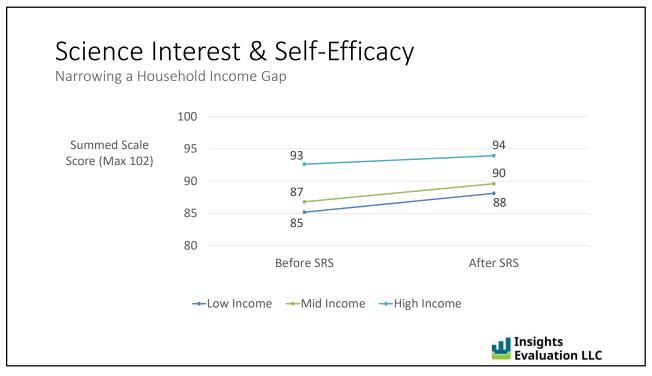


### Science Interest & Self-Efficacy

- I am able to construct scientific arguments.
- I am good at science.
- I am proud of my accomplishments in science.
- I get angry when I don't understand something in science. (Decreased.)
- I am worried I won't learn all of the things I'm supposed to in science. (Decreased.)







# Science Interest & Self-Efficacy

Asked at the end of the SRS, "did participating in the symposium impact your understanding of the scientific process and what it's like to do science research?" 79% of students responded affirmatively.



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#### **Student Comments**

I've never done research on this level or been to an event like this so I learned a lot about the research and review process. -10<sup>th</sup> grade student, Northeast It impacted my understanding of the scientific process and what it's like to do science research. It gave me a better perspective on science. -8th grade student, Southeast

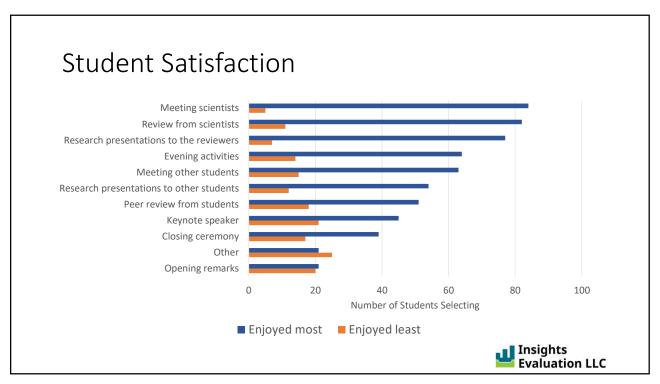
I began to realize the importance of science and research in our lives. The research symposium left a big impact on my life. -10<sup>th</sup> grade student, Midwest

Participating in this year's SRS has given me more inspiration and ideas on the scientific process. Doing science research for my project was fun and interesting.

-10<sup>th</sup> grade student,
Southwest







#### Teacher Satisfaction

92% of teachers were satisfied (40%) or very satisfied (53%) with the SRS for themselves

92% of teachers were satisfied (30%) or very satisfied (62%) with the SRS for their students

84% of teachers said "yes," the SRS improved their ability to integrate science research into their classroom or program

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#### **Teacher Comments**

"It has made me feel more confident in asking the questions and giving the students more time to discuss and/or explain themselves. Stop rushing them and let them be more creative." – Teacher, Midwest

This is a great real world experience for the students. They see a very high level of peer research and have an opportunity to present for STEM professionals. -Teacher, Southwest "I really learned how to better facilitate scientific writing. I am looking forward to expanding next year. I loved this project!" – Teacher, Southwest

The symposium was informative and gave the students an opportunity to engage with other students. However, I did not feel that it was "student-friendly." There were a lot of speakers, but not many activities. -Teacher, Southeast



Fewer speakers targeting younger audience

More "doing" science

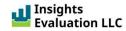
## Teacher Suggestions

Teacher viewing of student projects

Opportunities for students to meet scientists and learn about their field of study

**GLOBE** training for teachers

Introduction to the reviewers



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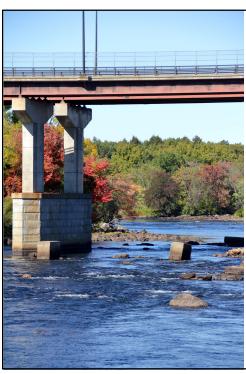
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## Thank you!

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