# Head Start on Engineering Visitor Studies Association, July 2018, Chicago, IL

# **PROGRAM GOALS**

Head Start on Engineering (HSE) is a multicomponent program integrated within Head Start and designed to spark and sustain interest in the engineering design process for preschool children and their families from low-income backgrounds.



Interest is conceptualized as a family-level system:

- Parent attitudes, beliefs, and knowledge;
- Parent and child use of engineering design;
- Family engagement with HSE activities; and
- Family engagement with engineering-related activities and experiences beyond HSE.

# **RESEARCH DESIGN**

During the 2017–18 school year, we conducted a pre/post evaluation with 28 families and 8 staff members at three Head Start locations. Primary data collection methods included:

- Pre- and post-program surveys
- Post-program interviews
- Monthly online journals (staff only)

Secondary methods included team observations and reflections, Head Start staff debriefs, and input from an advisory council of Head Start parents.

**Principle Investigators** Scott Pattison Gina Svarovsky Marcie Benne Pam Corrie

**Project Team** Verónika Núñez Cynthia Smith Raquel Stewart Head Start staff





## **Science Center Visit**



**Classroom Activities** 

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Learning Innovation



Home Visits and Support



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4 = several times a week. 1 = never.  $n_{\text{Dec}}$  = 10,  $n_{\text{May}}$  = 8. Change in composite frequency significant between Dec. and May (p = 0.021).

Center for STEM Education

