



How can we go beyond broadening access to disrupt systems of inequity in STEM education?



Working Together in New Ways

By positioning educators, researchers, and families to work together in new ways, we aspire to disrupt traditional power structures.

- **Hosting bilingual Head Start staff meetings** helps elevate the voices of Spanish-speaking aides and assistants
- **Developing in-depth relationships** between research liaisons and individual families supports families during the pandemic and creates new research opportunities
- **Encouraging parents to share ideas and stories** with each other builds community and inspires interest development



Re-Envisioning STEM Disciplines

By collaborating with educators and families to re-think our understanding of engineering, we aspire to amplify family assets and question traditional notions of STEM

- **Connecting engineering to everyday problem solving** makes engineering relevant and highlights families' existing knowledge and expertise
- **Centering story-based family engineering activities** creates space for engineering practices driven by family imagination and play
- **Defining engineering-related interest development broadly** highlights the unique ways families connect with and build on their program experiences

Head Start on Engineering: Developing a Learning Community to Study and Support Family-level Interest in Engineering

DRL-1906409

PROJECT OVERVIEW

Head Start on Engineering is an ongoing initiative focused on empowering families to use engineering to help their children thrive. We aspire to collaborate as equal partners with the communities we serve and inform a more equitable vision for engineering education in our society.

PROJECT STRANDS

- 1) Engage families with preschool-age children with engineering through a bilingual (Spanish/English) family-centered program integrated into Head Start
- 2) Co-develop knowledge about these experiences and how they support long-term interest development through design-based implementation research (DBIR) and longitudinal case studies

PROJECT LEADERSHIP TEAM

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This material is based upon work supported by the National Science Foundation under Grant No. 1906409 and 1906433. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



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