The RISE Project

Readiness through Integrative Science and Engineering

Project Mantras

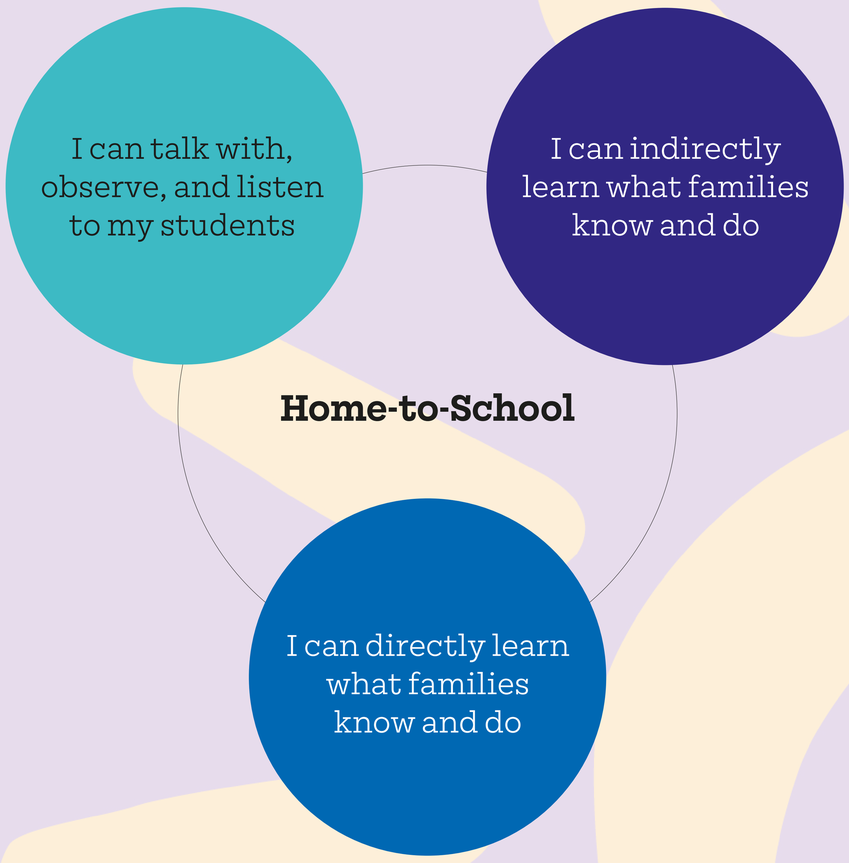
Science, Technology, and Engineering
are Everywhere

1. Parents as Equal Partners
2. Learning Builds on Familiar Knowledge
3. Culture is What We Do Everyday

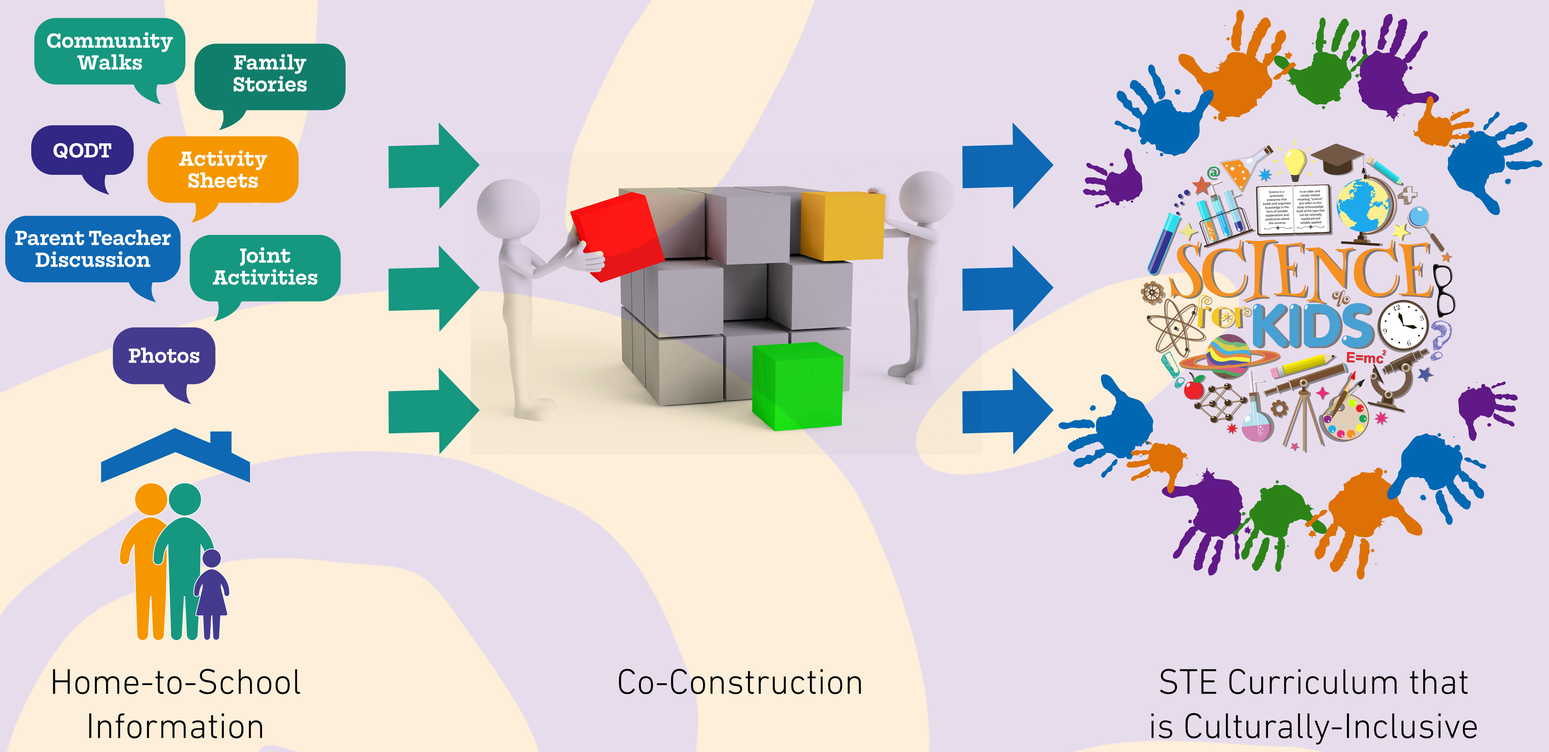
RISE focuses on preschool teachers and children pursuing explanations for how the world works (science – S) and solutions to problems (technology & engineering – T & E). By creating learning experiences that build from STE that is part of children's lives, teachers connect new learning experiences to what children already know and extend children's understandings.

Scientific & Engineering Practices	Crosscutting Concepts	Disciplinary Core Ideas
1. Asking questions & defining problems 2. Developing & using models 3. Planning & carrying out investigations (Observe, Describe, Document) 4. Analyzing & interpreting data 5. Using mathematics 6. Constructing explanations (science) and designing solutions (engineering) 7. Engaging in argument from evidence 8. Obtaining, evaluating & communicating information	1. Patterns 2. Cause and Effect 3. Scale, Proportion, and Quantity 4. Systems and System Models 5. Energy and Matter 6. Structure and Function 7. Stability and Change	1. Physical Sciences 2. Life Sciences 3. Earth and Space Sciences 4. Engineering, Technology, and the Applications of Science

Three Ways I Can Learn What Families Know and Do



Building Culturally-Inclusive Curriculum



Connecting... Deepening... Extending...

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