What would second graders invent to make the world a better place? A trash machine that converts all the garbage on the planet into marshmallows. A flying car powered entirely by solar panels. A gizmo that translates animal speech to human talk, so that animals can tell us when they are sick. The “nice” machine, where people can stick one of their fingers in a hole and the machine will count how many times the person has been nice. For this project, students approached the engineering process through a creative lens. In science, they studied and created simple machines. In literature studies, they read Cloudy with a Chance of Meatballs and The BFG, which both involve creative inventions like machines that rain meatballs or that catch dreams. Inspired by these ideas and their own imaginations, they dreamt up their own machines to help our society. They then investigated different materials and collaborated with 9th grade students from High Tech High International to design and build models of their inventions.

### Student Reflections

This project was kind of frustrating because you had to design it and build it. The teenagers were cool. They helped me find the materials and use the hot glue gun.

—Donnie, 2nd grade

Making our invention was fun. It was hard to design it and make it. The big kids were nice and they helped us a lot.

—Gigi, 2nd grade

The experience was really enlightening for me, I loved working with the students to help them bring their imaginations into reality.

—Heather, 9th grade

My partner wanted to make a bed that automatically woke you up by springing you from a horizontal sleeping position to an upright nearly standing position. She told me she didn't want her parents waking her up anymore so she invented this bed. I helped her put together the bed with cotton balls, bottle caps, popsicle sticks and other supplies. I liked her idea. Hopefully she will officially invent something like this when she gets older.

—Keana, 9th Grade

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